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ARCTIC NAVIGATION. . . . . *By Carlton Skinner, Lt., U.S.C.G.R.*
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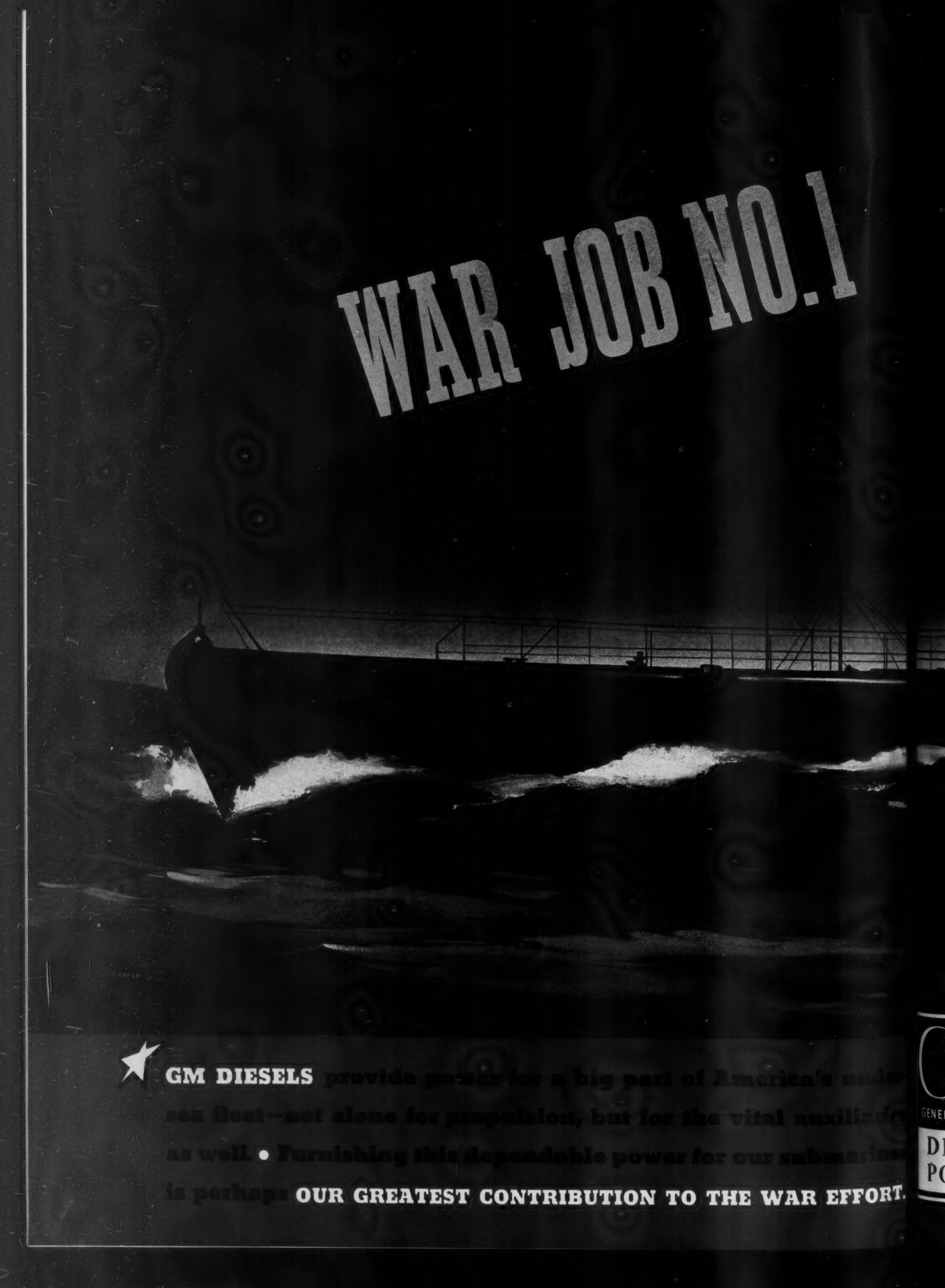

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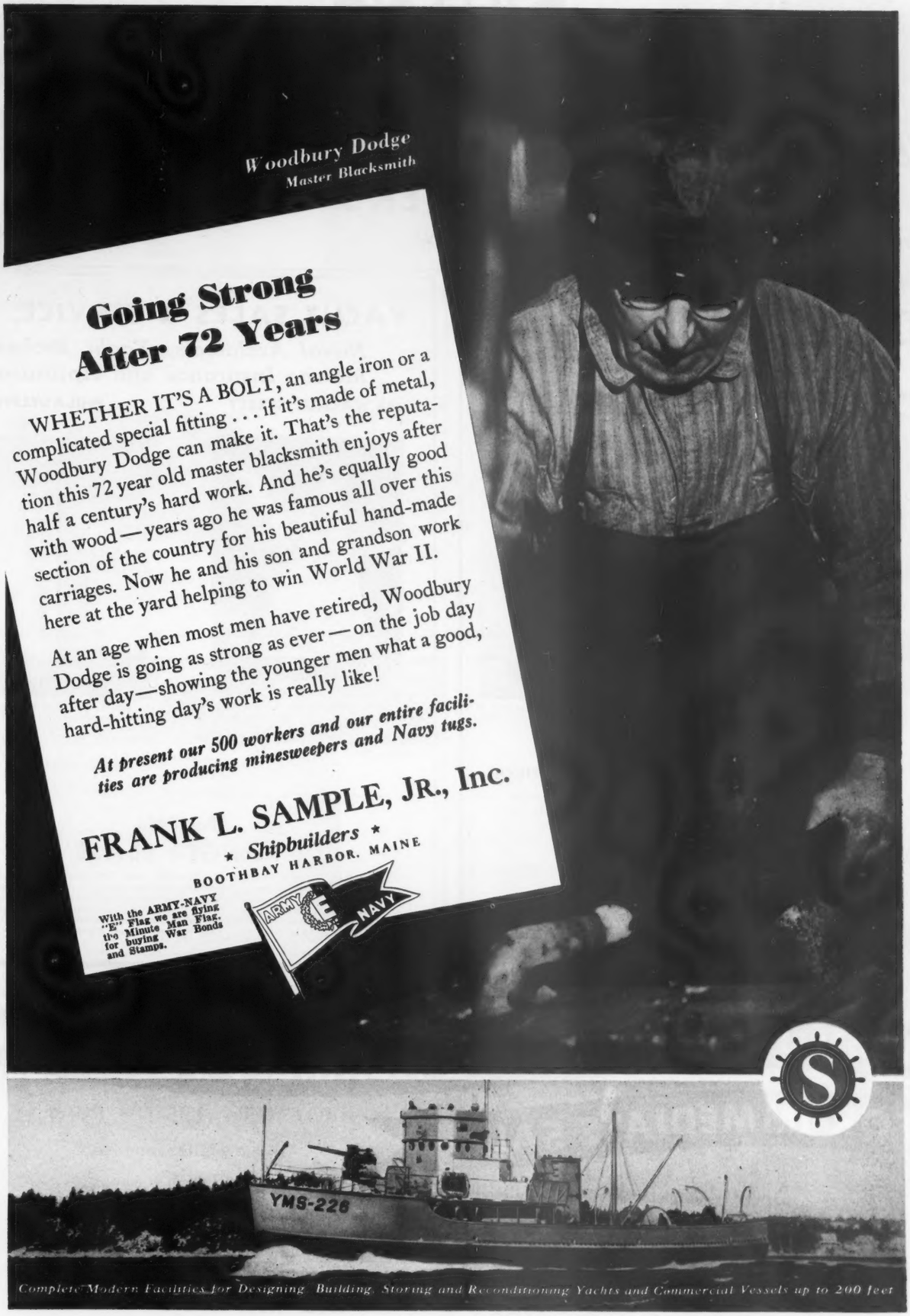

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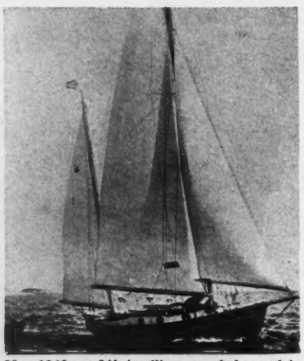
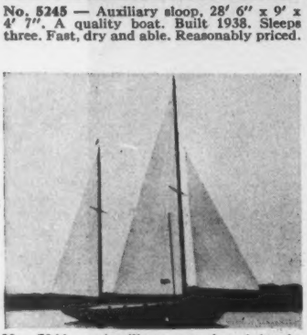


No. 1340 — 34′ Auxiliary yawl, located in Maine. Popular type with good accommodations for four. Few others available.



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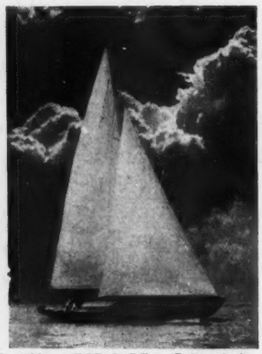
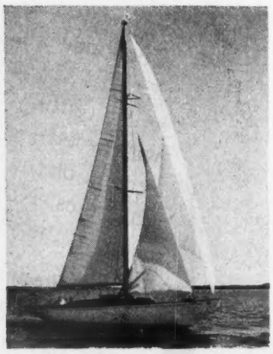


No. 1809 — FOR SALE — Geiger designed 43′ fast auxiliary sloop. Sleeps four and one crew. Excellent condition throughout. For further particulars, communicate with YACHT SALES & SERVICE, Inc., 1528 Walnut Street, Philadelphia, Pa.



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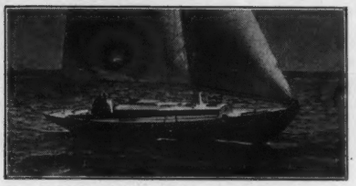

No. Y-7889 — FOR SALE — Auxiliary sloop, 38′ 9″ x 27′ 6″ x 9′ 8″ x 5′ 10″. Built from designs by Rhodes in 1940. Two berths in main cabin, double stateroom, lavatory and galley. Available as owner is in the Service. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2326.

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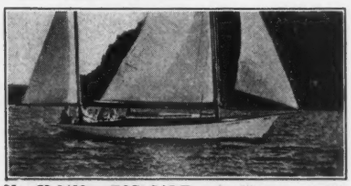
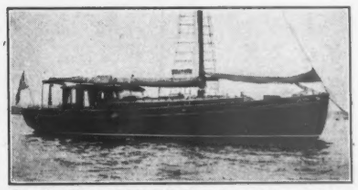
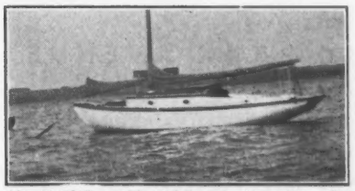


No. Y-8499 — FOR SALE — Auxiliary yawl, 38′ 6″ x 27′ 10″ x 10′ 5″ x 5′ 6″, built in 1937 from designs by Alden. Three berths in main cabin, double stateroom, lavatory and galley. Inventory includes Lux and winter cover. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.



No. Y-7018 — FOR SALE — One of the very few Motor Sailers still available. 40′ 2″ x 36′ 6″ x 11′ 6″ x 4′. Built from designs by Alden. Sleeping accommodations for five, lavatory, galley. New Lathrop motor in 1941. For further information consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2326.



No. Y-7547 — FOR SALE — Auxiliary sloop, 28′ 6″ x 22′ x 8′ x 4′ 6″. Built by Quincy Adams. Three berths in main cabin, pipe berth forward. Gray motor. One of several very interesting small auxiliaries that we are offering for sale. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York. VA 6-2326.

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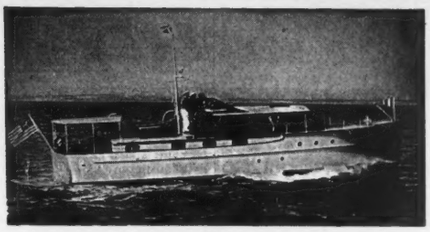

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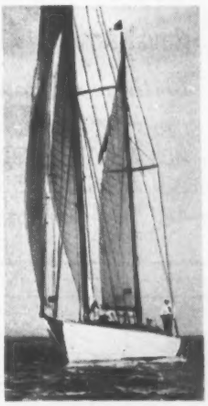

No. 2973 (*bottom left*) — Able cutter, 28′ x 22′ x 9′ x 4′ 7″. Designed by MacGregor, built by Alden Shipyard late 1938. 25 h.p. Gray motor. Galley aft. Two berths in main cabin, toilet and berth forward. Dry and able, good turn of speed. Located Narragansett Bay.

No. 270 (*bottom right*) — Auxiliary schooner, 43′ 7″ x 32′ 6″ x 11′ 7″ x 6′ 4″, Alden design, built by Rolfe, Quincy, 1929. Gray motor 1935. Large cabin with four berths. Galley, berth forward. Sails new 1941. Good equipment. Location Chesapeake Bay. Price low. We also have several other similar schooners, both keel and centerboard.

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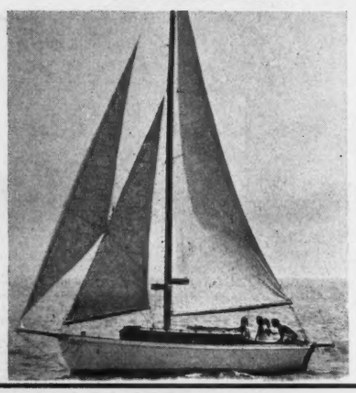

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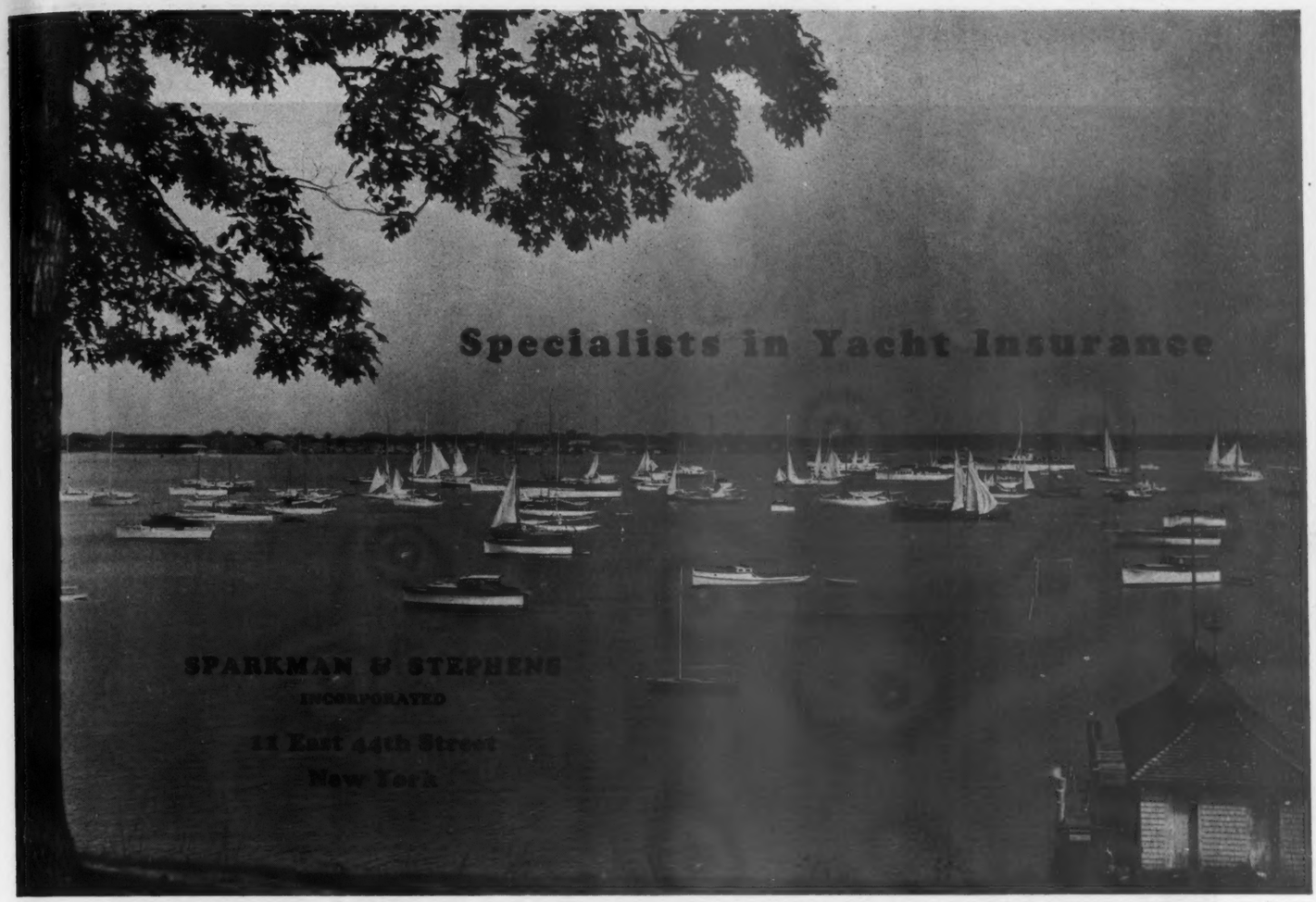

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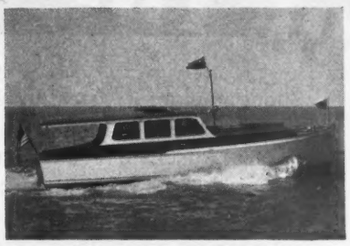

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VOL. LXXIII
NO. V

YACHTING

MAY
1943

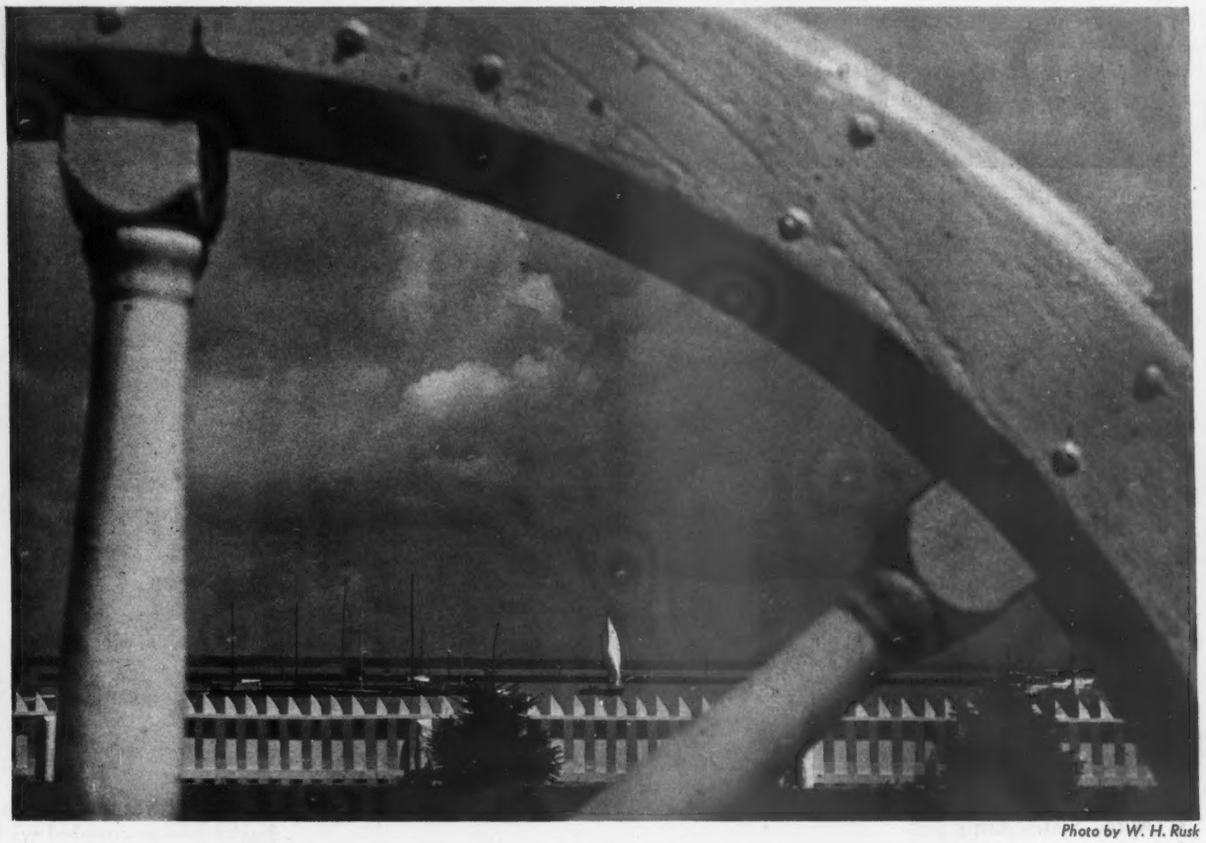

Photo by W. H. Rusk

Spring has come again and, despite the war, another yachting season stretches out ahead. This old ship's wheel, a venerable symbol of ships and the sea, is a familiar landmark on the grounds of the Sandusky Sailing Club

FRONT COVER, CONVOY DUTY . . . . . *From a painting by Walter F. Buehr*
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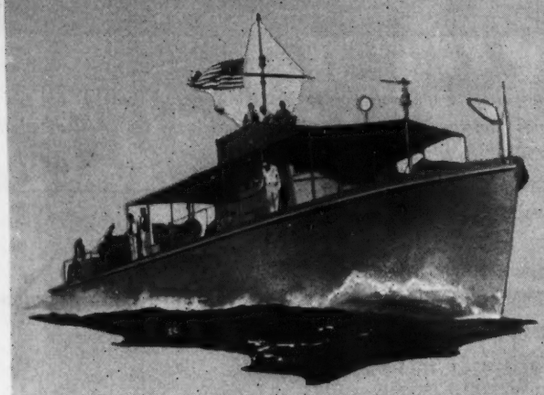
THE ARMY GOES TO SEA

WITH THESE TRIPLE SCREW KERMATH POWERED OFFSHORE RESCUE BOATS

Photographs by John De Groot



● United States Army personnel are manning these husky, seagoing craft for offshore rescue work. The doughboy has really gone to sea! And Dooley's Basin and Dry Dock, Inc. of Fort Lauderdale, Florida are building these 104 footers for the important role they soon will be called upon to play in new "zones of action."

Fast, staunchly built, well armed, highly maneuverable, these big boats reveal how the problems of every phase of modern warfare are being met skillfully by the men of America's High Command.

Three big, V-12 Kermath, 550 horsepower Sea-Raider special marine engines supply the driving power for each of these sleek, speedy, sea retrievers. Wherever the need for husky power coupled with dependable performance becomes a vital part of America's war effort—in landing barges, aircraft rescue boats, assault boats, picket and life boats or motor torpedo boats—Kermath power ranks as a favorite among men who leave no loophole unguarded in America's fight for freedom.

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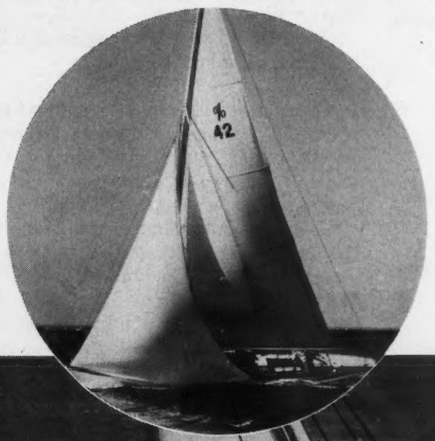
A YOUNG MAN AND HIS BOAT



First it's a skiff, making hazardous trips across the pond in the park. Then it's a real little sloop of his own, racing for club prizes, venturing through strange waters to friendly neighboring ports. It's grand training in sportsmanship and manhood.

Fine preparation too for the serious job of keeping the seas free, for future generations of boys and their pleasure boats. The Navy, the Army, the Coast Guard, welcomed the expert seamanship and boat-handling knowledge which America's young yachtsmen learned for fun. Hundreds of them are serving at home and all over the world. Their courage, their endurance, their ingenuity, add the touch of human glory which dignifies the horror of modern war. All America salutes them.

YOUNG HOWARD KAISER *has handled his boat* TURE *with verve and skill in many handicap races on Long Island Sound. Now he's an officer on a Naval Vessel, doing a full man's job in the struggle where no handicap is given, or asked. We're proud that young men like Howard Kaiser are fighting for us! Proud too, to be the keeper of his little ship for the duration.*

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IN THE WIND

▶ The merchant marine has proved by far the most dangerous of any of the armed services thus far in this bloody war . . . Why, then, do the unsung heroes of countless appalling disasters in the wild Atlantic, who are lucky enough to get home after their latest narrow escape from Davy Jones's locker, yearn to ship out again as soon as possible? . . . A psychoanalyst explained this recently by saying that a seaman, being a seaman, feels safer at sea . . . "and by safer I mean more relaxed, less tense, less fretful, less restless when he is at sea than when he is on land . . . This is so true that in some cases men who have been through repeated harrowing experiences have said in perplexity: 'I don't know why it is but when I am ashore I get the jitters . . . When I get in a ship, as soon as the engines begin turning over I feel all right even though I am going back to the same danger . . .' "

TRIBUTE

"Boy, can *he* take it!"
"Who d'ya mean, WHO?"
"The Collector of Internal
"Revenue."

—Pearl Swoon,
Permanent WAVE

▶ Lieut. *Joe the Ap* (Joe Appleton to you) is already thinking of acquiring a small acreage a ways back from the eastern bank of the majestic Connecticut, come peace, where he can do a spot of gardening along with his model making . . . He says he'll be satisfied to confine his aquatic activities to canoeing and swimming by that time — but I venture the old sea dog will be among the veterans in the next Bermuda race . . .

▶ J. Ritter Shumway, of Rochester, N. Y., sends me a quaint jeweler's advertisement depicting what purports to be a "rudder watch — with the spokes of a *rudder wheel*, swung from a twin sail boat pin . . ."

And he says: "Pictures, they say, can't lie. In this case I certainly am glad a picture was included because I now have some graphic idea of what a *rudder wheel* really is . . . I thought that you, too, might be doubtful on the subject so I am enclosing the picture just to prove that there is such a thing and that you might not be embarrassed by not knowing what it is when you hear the matter discussed, possibly at the next rendezvous of the Cruising Club at Price's Bend . . ."

MAY WHINE

No pork, no lamb, — How about a snout,
No veal, no ham, — An ear or a trout,
No beef, no bacon, — A hock or a rind
"No orders taken." — Or a hoss's behind?

—Caleb Bilgewasser

▶ Lieut. Comdr. Russel (*Pop*) Corey, who displays a nice turn of French when he gets warmed up but whose grasp of Spanish amounts only to a faint clutch, was sent to South America recently while the officer holding down the next desk to his at Ninety Church, who speaks fluent Spanish, was ordered to Africa . . .

WHAT TH' HELL DEPARTMENT

▶ The bridegroom-elect had been a sailing master in America for ten years . . .

—New York Times

▶ Latest nadir in the popular song:

There's a harbor of dream boats
Anchored on Moonlight Bay,
Anchored because their skippers went away . . .

▶ Theme song for decorated heroes could be: *Gladly my cross I wear . . .*

▶ Paradox: Many regular naval officers, graduates of the Academy, maintain accounts at the *Farmers'* Bank in Annapolis . . .

▶ The late J. P. Morgan bequeathed to the governor and board of directors of the Bank of England a tankard, dated 1692, which Queen Mary II gave to Captain Simon Janszen as an expression of her gratitude for his exertions and skill in seamanship which were the means of saving the life of King William III on the occasion of his voyage to Holland . . .

▶ The *Star of Scotland*, ex-*Kenilworth*, once notorious gambling ship that catered to suckers from Long Beach, Cal., has been sunk by a submarine . . . She was in war service under command of Captain Constantin Flink, who skippered the crazy old *Seth Parker* for radio entrepreneur Phillips Lord a while back . . . *The Star of Scotland*, returning from her first voyage, was attacked February 13th . . .

"When the first shell came over, the captain ordered all sail dropped," said John Hanley, agent for the ship's West Coast owners . . . "As the shelling increased, the crew put off in a large lifeboat . . . Captain Flink hurriedly tossed into the crew's boat a peacoat, bottles of water, medicine, chocolate bars and vitamin tablets *bought on a vague hunch*," continues the yarn, as reported by a Miss Dorothy Walker . . . "As the crew rowed away, he managed to lower a small lifeboat by himself . . . As he was pushing away, he saw the sub take the other lifeboat in *tow*," Mr. Hanley related . . . "Seeing long beards on the men, he realized they were Germans . . ."

The sub commander "pondered," continues Miss Walker's epic, in part . . . "He decided to let the captain go since *the Americans, excited by the shelling, had steered their lifeboat into the sub when taken in tow* . . ."

Sabotage, *hein?* . . . And fancy Cap'n Flink's deducing that because the gents aboard the pig boat had flowing hirsute appendages they were German! . . . Masterly, I calls it . . .

▶ The most constructive suggestion that has yet been made in regard to post-war planning comes from that sterling fellow, Dr. Cyril Edwin Mitchison Joad, author and professor of the University of London . . . Says the professor, "Monogamy is unsatisfactory . . ." He proposes that Great Britain's marriage laws be revolutionized — that polygamy be made legal . . .

Okay, Dr. Joad — but suppose you had to buy them all mink coats . . .

▶ Every once in a while a jaundiced metropolitan city editor sends a landlocked reporter out to get a "sea story" and the results are almost inevitably fantastic . . . I quote from a recent piece in this category . . .

"Leaning against the side wall of Pier 95 on the North River yesterday, the captain surveyed with satisfaction the vessel which was tied up in front of him. Its roof was ornamented with three fully rigged masts, with the mainmast standing a good twenty feet high . . .

" 'There ain't a neater sight on the river,' he remarked; 'just like the square riggers that took me round the horn years back . . .

" 'Sometimes,' he said, a faraway look in his eyes, 'we beat up westerly winds and it took us four or five weeks; other times we had fair winds and made it in a day . . .'

"The suggestion that he had captained these voyages brought a salty laugh from the captain . . .

" 'My, no,' he smiled, 'I was just the belly robber — you know, the cook. I was never a captain except here in New York Harbor . . .' "

▶ Bob Walker tells me of an incident that occurred at the U.S.N.R. Midshipmen's School at Notre Dame recently . . . "Our instructor," he relates, "was giving a daily quiz early in the course and he included the following question:

"A ship is anchored in a harbor where the tide is rising at a constant rate of 6″ per hour. Over her side is rigged a ladder which has rungs spaced one foot apart. The bottom rung is at the water's surface. How long will it be before the fourth rung from the bottom will be at the water's surface?"

"Believe it or not," continues Mr. Walker, "about a third of the class answered, 'Six hours' and almost as many more said 'Eight hours'" . . .

▶ Carl L. Wolsieffer sends me a cutting from an Atlantic City journal which reads:

"As we chugged along in a *333-foot* Chris-Craft in perfect luxurious style, we pulled up to a dock in the front of a lovely Florida estate . . ."

Whoa!!!

Mr. Wolsieffer, in his accompanying letter, says that although he has been too damn poor to afford anything larger than a sneakbox (and recently had to part with even that modest craft) he has always been able to scrape up four bits every month or so for an investment in YACHTING which he claims is "the best on the market" and every copy of which he has saved for the past five years . . .

Bravo, Mr. Wolsieffer . . . It's things like that which give this compartment the courage to go on . . . and on . . . (It's also, I might add, the indulgence of the Skipper). . . .

TELLTALE

Effective Support . . . The Coast Guard Auxiliary Patrol

Too few people realize the service being performed by this "civilian branch" of our armed forces. You'll see boats of the Auxiliary Patrol darting about dirty tramp steamers, photographing, patrolling dark coastlines, keeping an eye on vital dock areas. Not until the war is over, will we hear the complete story of their duties and how they were performed. The skippers, always prepared, are giving freely of their time—and the support they are lending the Coast Guard and the nation—is most effective.

Boat owners also can serve their country—as the Coast Guard wants privately owned motor craft kept in good order so that in an emergency they can quickly be called into service as coastal defense auxiliaries. So be sure to keep your boat ship-shape this year—ready for instant duty, should the necessity arise.

Meantime, remember that the men of the United States Coast Guard Auxiliary Patrol need your cooperation. Obey their instructions, have your papers in good order at all times, keep away from forbidden areas, sail only during permitted hours. Cooperation is little enough to give to those who voluntarily are giving a lot.

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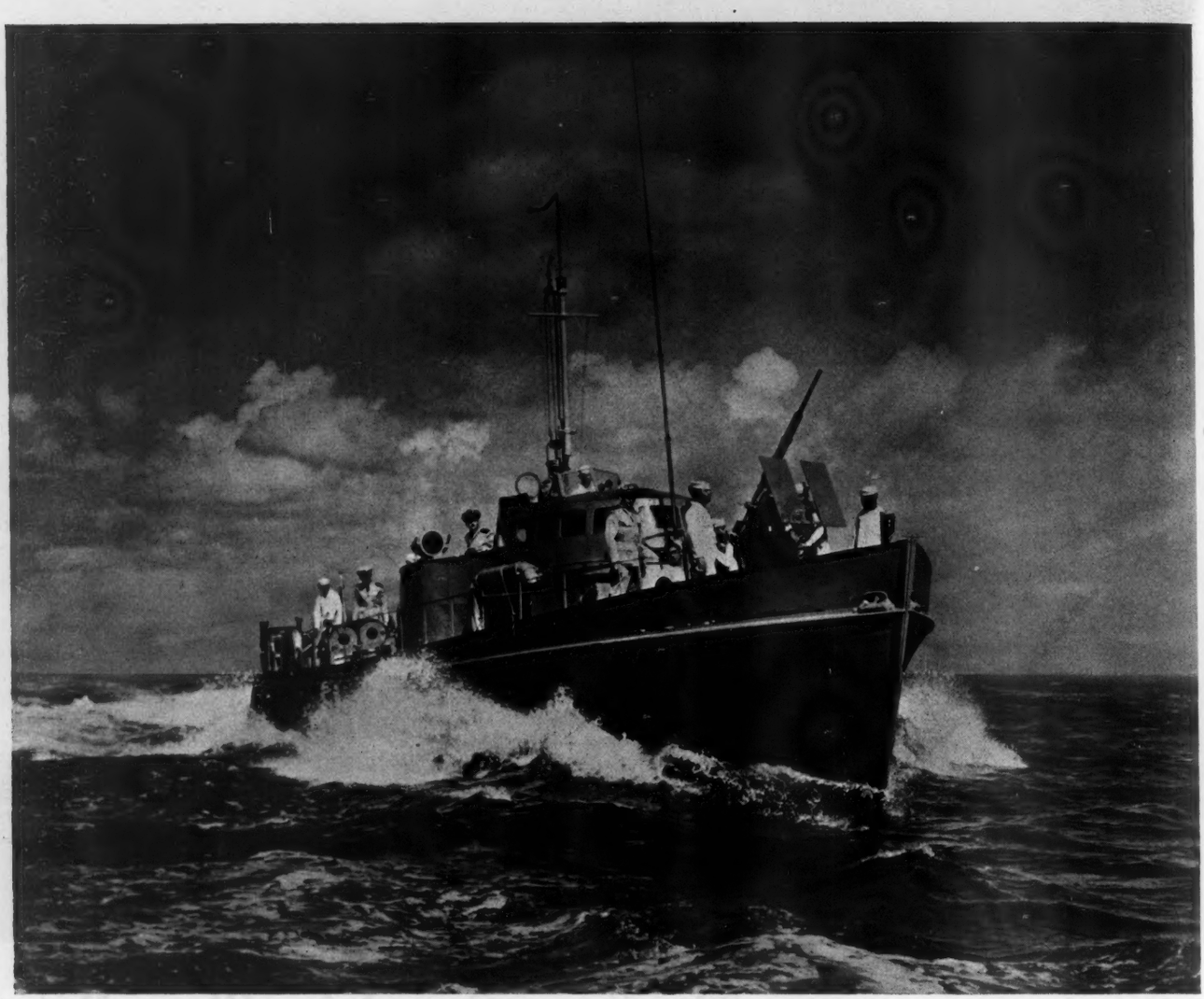
Timely and of interest to all yachtsmen, is a booklet we have just prepared entitled: THE ABC OF YACHT INSURANCE, with Suggestions on the Proper Care of your Boat. Write for your copy today; please ask for T-10.



"ALWAYS READY"

The Wheeler-built C.G. 83' cutters are well suited for coastal anti-submarine operations. They are designed for duty in all kinds of weather, and are sufficiently well armed to handle undersea marauders

Official U. S. Coast Guard Photo

YACHTING

Volume LXXIII MAY + 1943 Number 5

Official U. S. Coast Guard Photo

A 327' Coast Guard cutter knifes through a head sea. Escort duty in heavy weather is a punishing assignment

AMERICA'S "FIRST" FLEET

The Nation's Oldest Marine Service Today Operates One of the World's Most Diversified Fleets

By CRITCHELL RIMINGTON

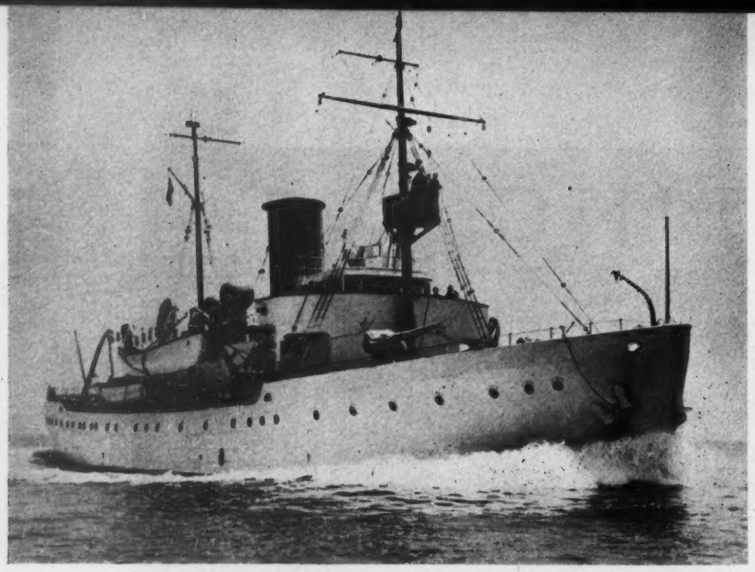
SINGAPORE, Reykjavik, Tulagi, Fedala. These are a few of the ports where Coast Guardsmen have been during the past year" . . . so reads a recent Washington communiqué. At first glance, such an array of geographical way stations comes as a common enough recital in these days of global warfare; but when such faraway ports are coupled with the name of a Service which the average citizen has heretofore known as a seagoing police force, then it is apparent that there is a story behind it. A story indeed!

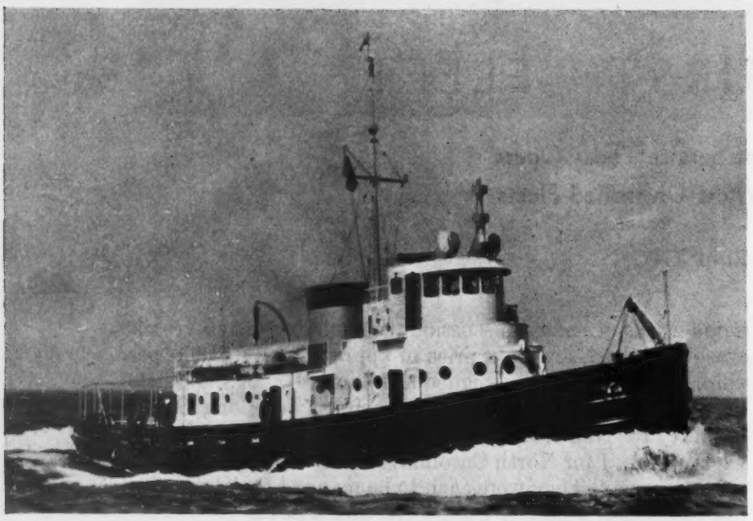
+ + +

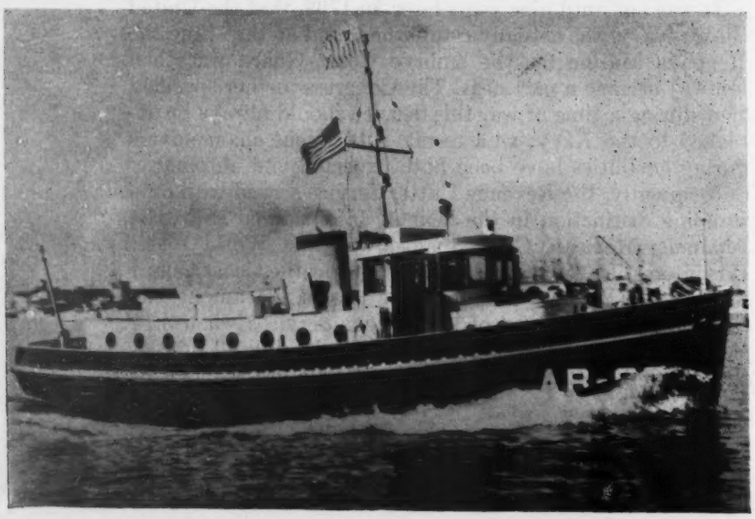
The labeling of the Coast Guard's vessels as America's "first" fleet will undoubtedly be met with raised eyebrows in more than a few nautical circles. Yet, as a matter of strict historical record, it was in 1790 that Alexander Hamilton's Tariff Act established a Revenue Cutter Service which authorized the construction of armed sailing vessels to insure the collection of the Customs. This service was attached to the Treasury Department but was established with due regard for naval tradition, and with fitting ceremony.

It appears that Mr. Hamilton had the politician's usual difficulties in securing approval for his legislation but, after some weeks of heated discussion, the building of ten vessels was authorized, and at a price of approximately $1000 per ship. The vessels were assigned as follows: "2 for the coasts of Massachusetts and New Hampshire; 1 for Long Island Sound; 1 for New York; 1 for the Bay of Delaware; 2 for the Chesapeake; 1 for North Carolina; 1 for South Carolina; and 1 for Georgia." They were each to be manned by "1 master, not more than 3 mates, 4 mariners, and 2 boys."

It was not until nine years later, in 1799, that the United States Navy was actually established, and at that time the Revenue Marine (as the embryo Coast Guard was then known) became a part of it. The Congress further specified that during a time of war this Service should always be attached to the Navy; as a result, subsequent change-overs during hostilities have been both expected and automatic. Subsequently, the Revenue Cutter Service served with outstanding distinction in the War of 1812 as well as in the Seminole, Mexican, Civil, Spanish and first World Wars. It is interesting to note that in the last war the Coast Guard suffered the greatest proportionate loss of life among the commissioned personnel of the various Services when 3.14 per cent of its officers were killed. Considering all officers and enlisted men, the percentage of battle losses was 1.74







per cent in comparison with that of 1.42 per cent in the Army. Moreover, the Coast Guard suffered the greatest single loss when the cutter *Tampa* was sunk with all hands.

Contradictory as it may sound, World War I provided the Service as we now know it with its first baptism of fire, for it was not until 1914 that the Revenue Cutter Service and the Life Saving Service were combined under the new name of the "United States Coast Guard." This combined force continued to function under the direction of the Treasury Department, leaving the Lighthouse Service in the hands of the Department of Commerce. In 1939, the final consolidation was completed and the Lighthouse Service then lost its individual identity upon joining the Coast Guard "family."

Today, the Coast Guard is a full-fledged unit of the Navy. "We are proud to be part of the Navy in this war," says Vice Admiral R. R. Waesche, "and eager to do well the tasks assigned to us." Since the day of Pearl Harbor, the Service has more than carried on its fighting traditions. Already three vessels have been officially reported lost by enemy action, and it may be assumed that additional losses have been suffered. The Cutter *Alexander Hamilton* was torpedoed off Iceland, the *Acacia* was sunk in the Caribbean and the *Muskeget* disappeared without a trace, somewhere in the North Atlantic. A number of Navy transports are now completely Coast Guard manned and officered.

\+ + +

The traditional motto that guides the men manning the Coast Guard's 420 surf stations — "You have to go out but you don't have to come back" — is extraordinarily appropriate in these days of amphibious warfare. For Coast Guardsmen have played a prominent part in the manning of landing barges in both the Atlantic, Pacific and North African theaters of operation. Transports under the jurisdiction of other branches of the armed forces often have Coast Guardsmen not only as both officers and crews, but as coxswains and crews for their landing boats. An indication that their usefulness is not limited to such operations is found in the report of Technical Sergeant Hurlburt, a Marine combat correspondent: "There is not a marine in the Solomon Islands who will not pay tribute to the gallantry of the Coast Guard and Navy units that took part in the attack. During the torpedo bombings, Coast Guard gunners manipulated their pieces with devastating effect, scoring hit after hit on the low flying Nipponese."

Although the famous Alaska patrol is no longer in operation, Coast Guard cutters are still to be found in the Bering Sea. On the other hand, the Greenland patrol is today more important than in any pre-war period. The Coast Guard is also providing vessels for training activities of numerous Central and South American navies and certain ships are permanently attached to harbors in Haiti, Cuba and San Domingo for this purpose.

A tabulation of the peacetime activities of the Coast Guard includes almost every known duty in the catalogue of marine activity. Included in these conglomerate responsibilities are such duties as yacht inspection, manning of surf stations, maintenance of the iceberg and weather patrol, supervision of Merchant Marine inspection, servicing of aids to navigation, maintenance of the International Whaling Act . . . to say nothing of the operation of harbor fire boats and the patrolling of regatta courses! The above stated duties are but a scattering few of the hundreds of

Top, a 165' steam cutter. Top center, a 165' Diesel-driven cutter in full "battle paint." Bottom center, harbor cutter "Naugatuck." Bottom, the 56' cutters are used for miscellaneous duties. Official U. S. Coast Guard Photos

vital responsibilities which are regular assignments of this versatile and highly efficient service, in times of war as well as peace.

The war has done little to reduce either the number or variety of these nautical chores, and to them have been added an equally vast number of combat assignments. The solution to handling these many tasks has been found not only by the enormous increase in the size of both the regular Coast Guard fleet and personnel, but by the assigning of many of the coastal and harbor duties to Coast Guard Temporary Reserve and Auxiliary vessels. Today, there is every indication that these yachtsmen volunteers and their fleet of 15,000 vessels will be given added responsibilities in the months to come for, as the war moves further and further from American shores, so will regular Coast Guard vessels and personnel be drawn further afield into these new theaters of war.

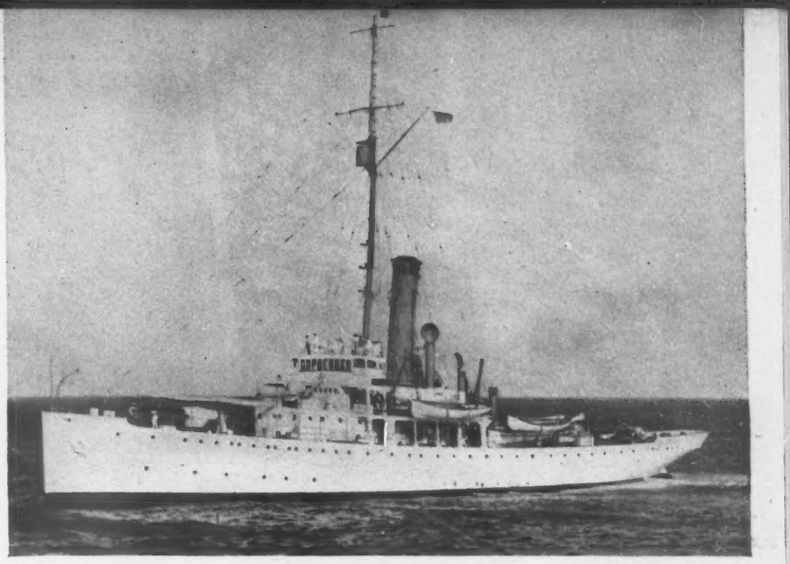
+ + +

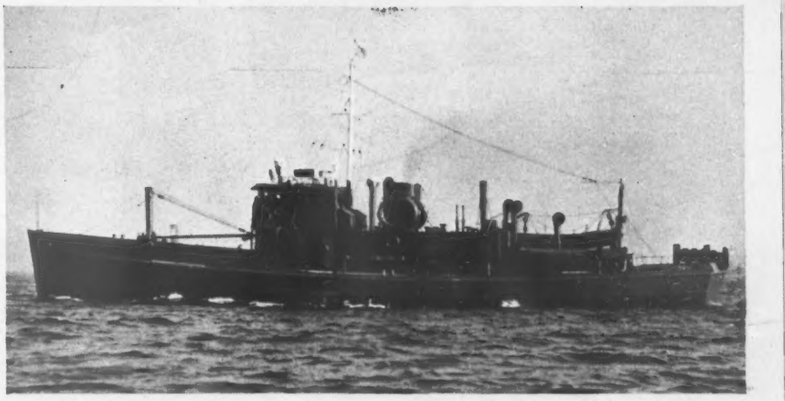
To obtain a bird's-eye picture of the extraordinary size and variety of the present Coast Guard fleet (or as much of it as wartime censorship restrictions will permit), one can best start at the very bottom of its imposing Fleet List, and work up from the vast mosquito fleet of skiffs, punts and motor boats to the "flagships," the 327′ cutters, which in recent months have been knocking off subs in a highly spectacular fashion.

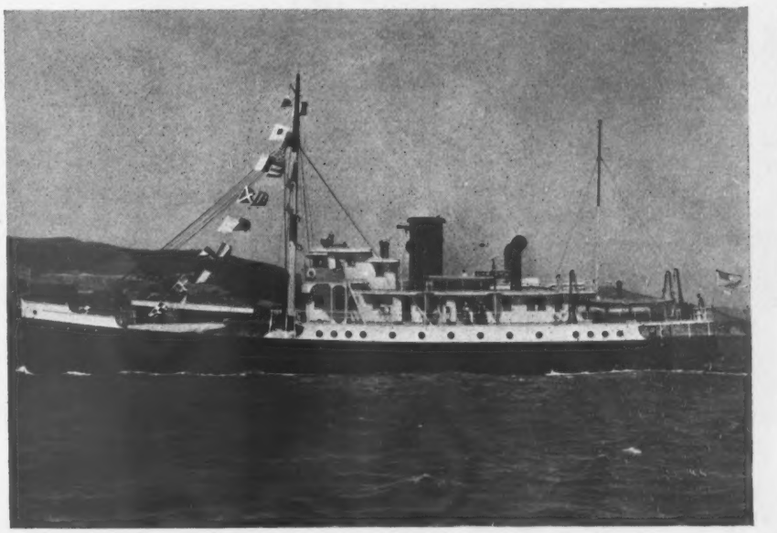
But a word about a few of the Coast Guard's many types of shore establishments. First, there are the training schools such as the Coast Guard Academy at New London, the more recently established school at St. Augustine and the combination base-shipyard-training school at Curtis Bay, Md. The vessels employed at these various locations are of every imaginable kind — including 14 International sailing dinghies, large cutters, and SC and PC chasers taken over from the Navy for training purposes. Second, there are the Coast Guard operational bases, which are scattered along the Atlantic, Pacific and Gulf Coasts as well as on the Great Lakes and the more important rivers and canals. Here are found miscellaneous types of harbor craft — as small as 20′ motor launches and as large as 110′ tugs of the YT class. Here, too, are barges of various sizes and a bewildering assortment of small motor boats which are used for many utilitarian duties.

One of the major responsibilities of the Coast Guard, in so far as coastal and inland operations are concerned, is fire protection. Hence every shore base includes one or more fire boats in its floating equipment, while additional vessels are located in those ports where no municipal fire boats are available. The building and converting of the Coast Guard's fire boat fleet is a story in itself, for not only have 250 such vessels been contracted for (of which many are now in operation), but many small harbor tugs and commercial boats have also been converted for this important duty. A special fire-fighting training school is now in operation at Fort McHenry, Maryland.

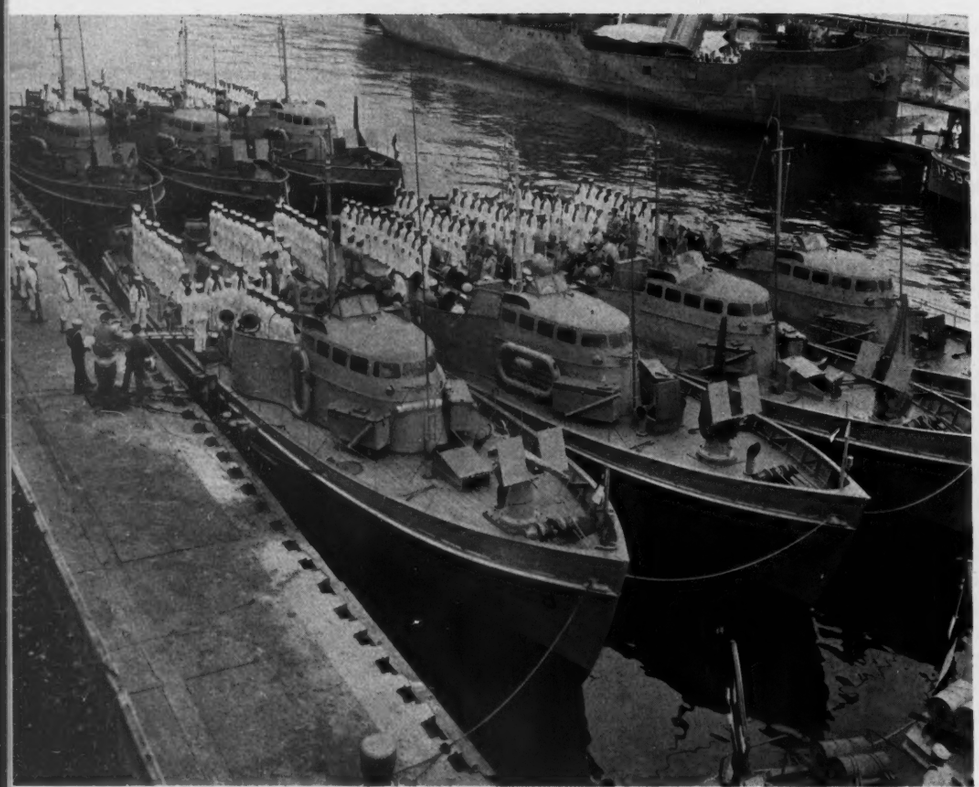
Third in the list of Coast Guard establishments are the coastal and offshore lighthouses, the floating equipment of which is apt to be nothing more than a pulling boat or two. Last, but in some ways much the most important, are the lifesaving stations. They are so familiar to every yachtsman that a description of them is hardly necessary. Yet what is





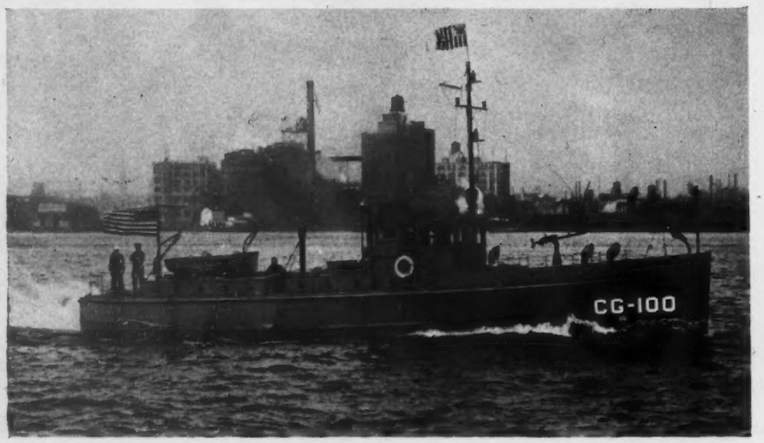


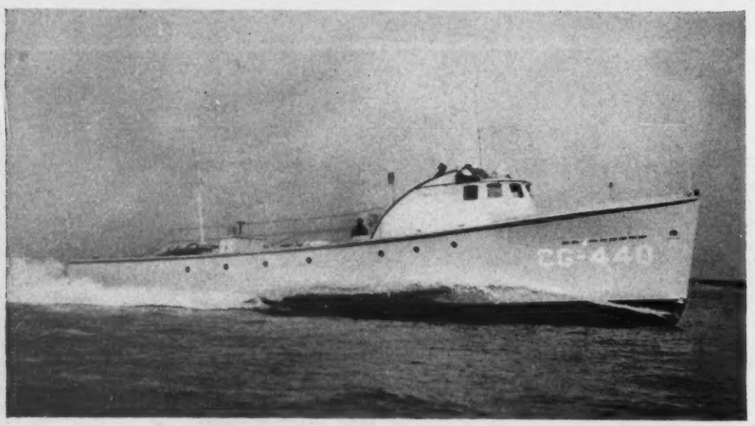
Top, the 240′ cutter "Modoc." Ships of this class are designed for offshore operations. Top center, the 125′ cutter "Active." Bottom center, a 180′ cutter of recent design. Bottom, the tender "Walnut", like her sister ships, she was designed to service various types of navigational aids. Official U. S. Coast Guard Photos

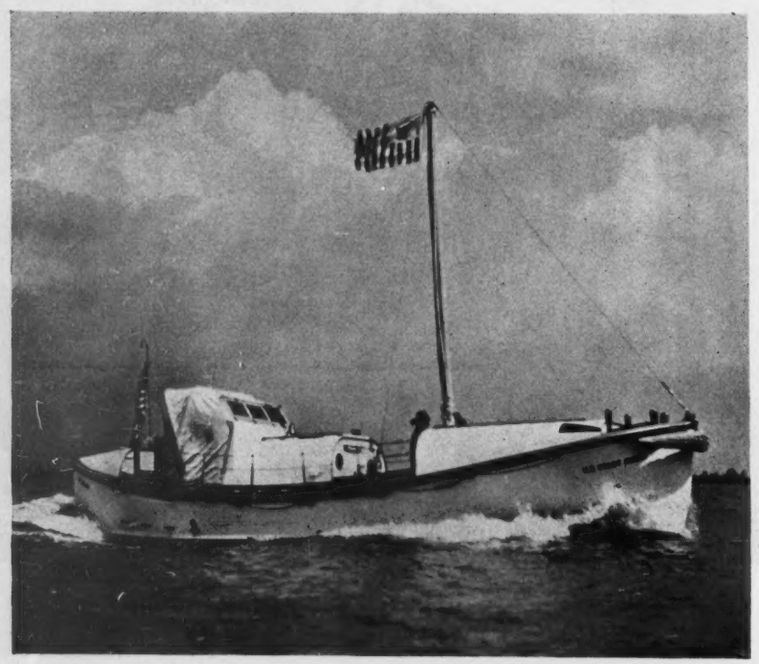


Convoying merchant ships, searching out undersea raiders, servicing aids to navigation, maintaining beach stations, directing the activities of the Auxiliary and Reserve, guarding docks against sabotage, operating fire boat patrols, manning invasion barges and transports . . . these are but a few of the duties of the Coast Guard in wartime. At the lower left is shown the presentation of ten 83' cutters to the Cuban Navy. Official U. S. Coast Guard Photos

THE COAST GUARD IN ACTION!







not commonly known is that each and every one of the 200 stations is today very much in operation, and will continue to be throughout the duration. Their wartime duties and responsibilities are greater than ever before, for not only are they concerned with saving the crews (and often the vessels) which are in difficulties, but so also have they increased their endless beach patrols as a safeguard against both attempted sabotage and possible invasion. It will long be remembered that it was a Coast Guardsman, on regular beach patrol, who apprehended the German saboteurs who had effected a landing from their submarine on a forlorn bit of Long Island Beach.

The No. 1 boat of the beach station is the pulling surf boat. They are of two principal types, the Monomoy (which ranges from 23′ to 26′ over all) and the Race Point (which is an even 26′ over all). The latter, which is self-bailing, has an over all beam of 7′ 3″. She is doubled-ended, weighs 1553 pounds and is lapstrake-built of cypress with gunwales and frames of oak. These boats carry eight oarsmen (each manning a 12′ oar) with a boatswain astern with an 18′ sweep. The motor surf boat is approximately the same size as both the Monomoy and the Race Point types and can cover 40 miles at eight knots.

The pride and joy of every station are the motor life boats, and well they may be. 36′ 8″ long, approximately 11′ beam and with a draft of 5′ 7″, they are non-sinkable, self-bailing and self-righting. The explanation of the latter is found in a solid bronze keel weighing a ton (for a boat of approximately 11 tons!). Equipped with three turtlebacked cabins which are completely watertight, powered to make 9 knots or to cruise 300 miles at 6 knots, and capable of holding 30 persons, they have more than earned their cost of $18,000 per boat. If you are ever close by a station which is equipped with one of these remarkable vessels, an inspection trip is suggested, for they will give you a new idea of the term "safety at sea."

+ + +

Now we come to the real Coast Guard Fleet, a vast assemblage of vessels designed for any kind of duty, anywhere, any time. Obviously, all of them were not designed for deep water operations but there are enough which are (as everyone who has read recent war communiqués knows), plus hundreds upon hundreds of boats designed for inshore operations. In the past, a majority of the Coast Guard's medium sized vessels were known as patrol boats but, since 1940, all vessels 72′ and over have been rated as cutters (excepting auxiliary craft and lightships). Today such vessels are rated as YPs.

Smallest of the fleet, and among the most popular boats in the Service, are the 38′ picket boats. Few are the yachtsmen who have not seen them so that any description is quite unnecessary. Perhaps their most utilitarian feature, apart from their compactness and sea-keeping qualities, is their speed. Powered by Sterling, Kermath or Hall-Scott, their cruising range is considerable.

The next standard size cutters are the 74's, but for the record it should be noted that the service also possesses two 65-footers and two 72-footers. Both classes are of 15′ beam, are powered by Vimalert and are capable of 34 knots. The first of the 74-footers were built in 1924 and a year later the class totalled 203; today, only 47 are still in commission. Powered by Sterling, they are rated at 13.8 knots. Two other

Top, an 80′ patrol boat. Top center, one of the famous 74-footers; these sturdy vessels are almost a trademark of the Coast Guard's small boat fleet. Bottom center, one of the 72′ patrol boats. Bottom, a TR type motor lifeboat.
Official U. S. Coast Guard Photos

odd sizes are the 78-footers, which are 6 in number and are capable of 21.7 knots, and the 80-footers, which are still the fastest small cutters in the service. There are nine of these Liberty-powered vessels which can make a speed in excess of 25 knots. It hardly need be added that they were designed to catch rum runners!

It is no exaggeration to say that the 83′ cutters are the darlings of the coastal fleet. These small but sturdy vessels, in the relatively short time that they have been in operation, have achieved an enviable combat and performance record. The 212 in the class are actively engaged in all manner of inshore anti-submarine activities and, whereas any tabulation of their box score falls under the head of restricted information, it may be stated that their scalp belts are not exactly empty! The dimensions of these boats are 83′ 1″ by 16′ by 4′ 6″, and in that relatively small space they pack an astonishing amount of operative and combative gear. Powered by Sterlings, their speed is in excess of 20 knots.

Security restrictions prohibit any mention of the character of the armament of any of the foregoing vessels, but it is sufficient to say that they have what it takes — including small arms and depth charges.

\+ + +

In any consideration of this "small boat fleet," prominent mention must be made of the countless number of commercial vessels and yachts which have been converted for wartime duties. These are not to be confused with the large number of Coast Guard Reserve and Auxiliary vessels which are on part time service. These include the former *Nourmahal*, for example, *Madelon*, the ex-Presidential yacht *Mayflower* — now known as the *Butte*, and the *Atlantic*, now attached to the Coast Guard Academy. To these can be added countless commercial vessels now serving as auxiliary fire boats and harbor vessels.

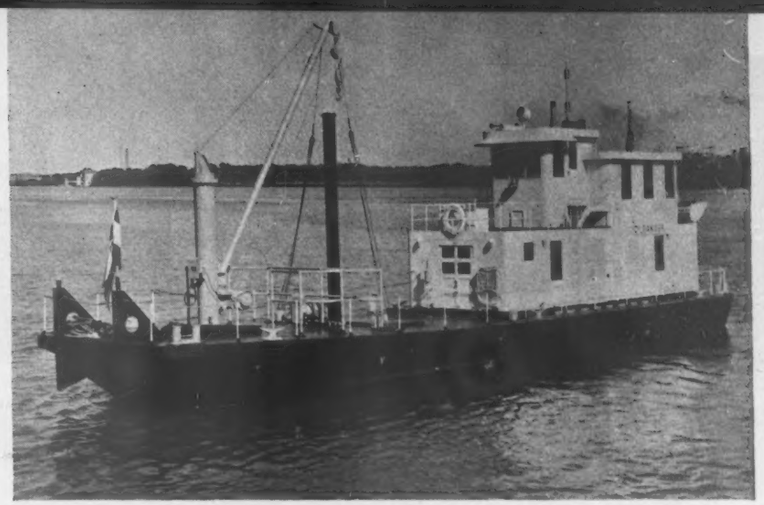
No greater contrast could illustrate the variety of the Coast Guard's fleet than to consider next its "flagships," the 327′ cutters. These, as are all the other large cutters, are rated by the Navy as PGs (patrol gunboats). With a beam of 41′ and a draft of 12′ 6″, they displace 2216 tons, are of 6200 horse power and are capable of better than 20 knots. Their cruising range is estimated at being in excess of 8000 miles. To date, one of them, the *Hamilton*, has been lost; the remaining six are the *Bibb*, *Campbell*, *Duane*, *Ingham*, *Spencer* and *Taney*.

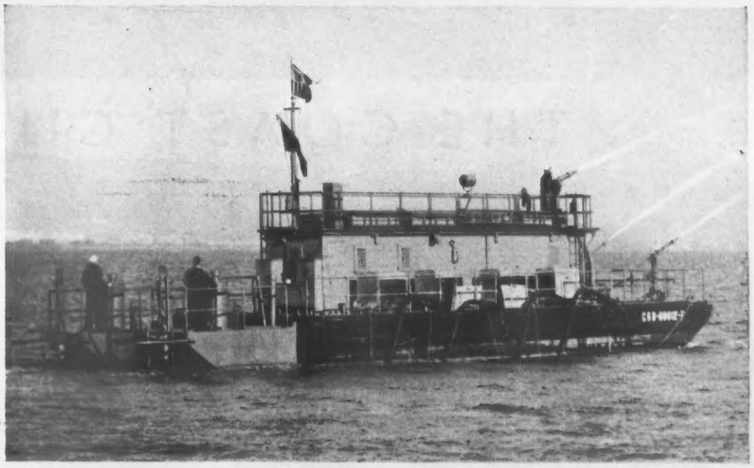
The most dramatic account of anti-submarine action to be made public thus far found the *Campbell* the hero of a memorable action. Reads the Naval communiqué: "The *Campbell* was protecting a United Nations convoy, and in all but one action against the attacking U-boat attack the *Campbell* was alone.

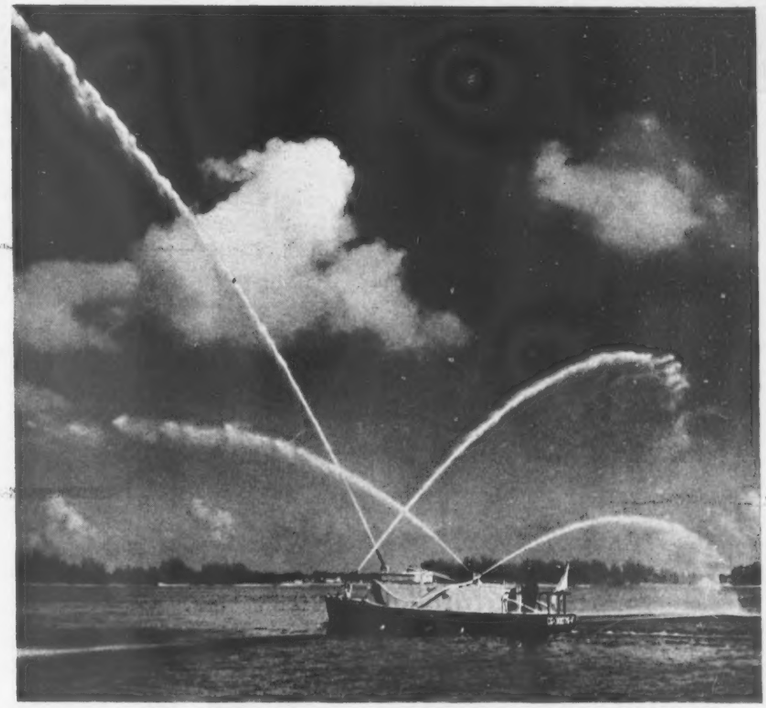
"The sixth U-boat was first attacked by shell fire as the *Campbell* bore down upon it. Then it was rammed, and as it drifted free after the collision it again came under the *Campbell's* blazing guns at point blank range. The cutter's officers watched the big U-boat shudder from the impact of exploding shells and saw it slowly settle and sink stern first.

"The collision damaged the *Campbell*. With the aid of a Polish destroyer that had fought at Dunkerque and the further assistance of a British destroyer and corvettes, she

(Continued on page 76)



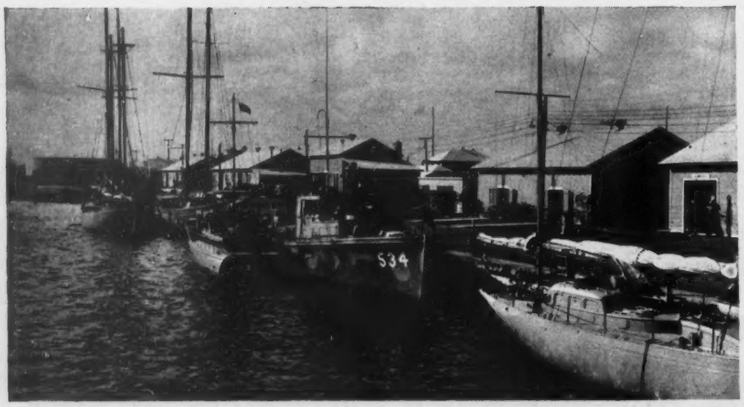




Top, "Oleander," a river type tender. Top center, one of the Coast Guard's many fire barges, this one is propelled by two Chrysler marine tractors. Bottom center, a Hanley, all-welded, jet propulsion tubular rudder fire boat. Bottom, this 38′ picket boat was built by Henry R. Hinckley of Southwest Harbor, Maine. Official U. S. Coast Guard Photos

The Auxiliary, including both boats and men serving in the Temporary Coast Guard Reserve, provides impressive proof of the major contribution which yachtsmen everywhere are making to the nation's war effort.
Official U. S. Coast Guard Photos

THE COAST GUARD AUXILIARY



MAY, 1943

"THEM CRUISIN' WOMEN"

A Voyage "Down East" in an 18-footer

By VERA R. AMREIN

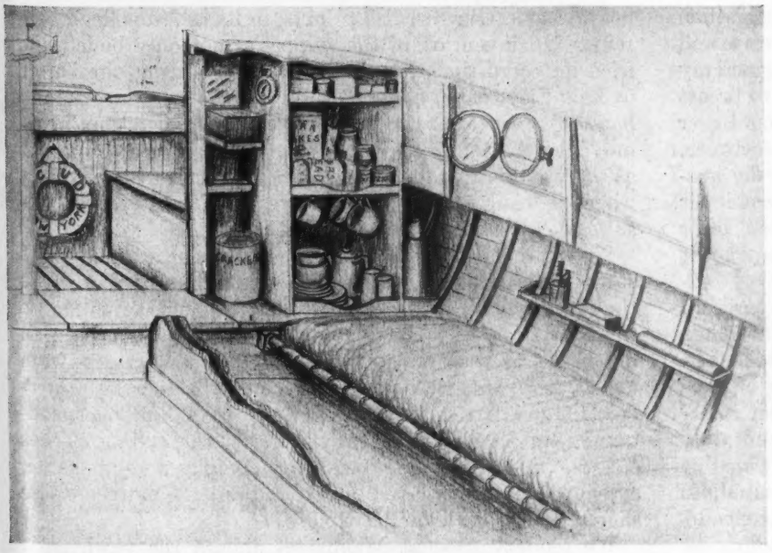
THOUGH it is a fact not generally known, the cruise of the little sloop *Scud* * owed its origin to Richard Henry Dana. Ever since I could remember, "Two Years Before The Mast" had stood on the shelf reserved for sea tales above my husband's desk. And, each time I caught a glimpse of its aged covers there would come to me a whiff of salt breeze, rhythm of the sea, and in imagination I would be making myself indispensable on the deck of a yacht, in faded blue slacks, my feet in espadrilles, a shapeless duck hat upon my head. Above me would billow the swelling white sail and, as I leafed through that best of American sea tales, on one side of me would have to be Mount Desert, and away off in the blue haze Grand Manan. It was not just my idiosyncrasy that Dana must be read afloat. I had already experienced the futility of absorbing sea lore on land. Before my husband had permitted me even to set sneaker on the 50-foot yawl in which he sails, he had me spend an entire winter reading Calahan.

That same winter, by an odd coincidence, my husband was taking an advanced piloting course. We bribed our child into retiring an hour earlier the night father reached tide table three, by allowing her to stay up a bit longer the nights we practised sailing. Together, we navigated our living room furniture at least 10,000 nautical miles before we passed his final examination.

Naturally, in view of this, I had considered myself thoroughly seaworthy when, early in July, I was invited to be one of a week-end party in the yawl. I was letter perfect in rules of the road, I could make a wall-and-crown in record time, and two knots fairly fast. I was glib in the vocabulary of the sea — exceptionally glib. But, with all this knowledge, the only tasks considered suitable for a mere woman were to keep out of the way, stow the sail stops, and let go the lee backstay. Had I, as the only representative of my sex aboard the yawl that week-end, at least been consulted on the matter of meals, I might not have resented so bitterly those many hours wasted with Calahan. But my husband, whose knowledge of my kitchen is confined to the top shelf of the ice box where the beer is kept, considers himself second only to Escoffier in a galley.

With Dana, then, as motive power, I began to plan a voyage in a vessel of my own. There was only one stipulation in my mind in plotting the cruise, and it affected the crew. It was to be strictly *non*-coeducational. I knew only one woman whose sailing experience exceeded mine and I confided my scheme to her in the hope that she would suggest not only joining the party but sharing the expense. Her enthusiasm for the whole project exceeded, if possible, my own. For, not only had she been nursing a secret desire to sail a vessel some day from New York as far Down East as time and weather would permit but, by a coincidence that could happen only in fact, her favorite ancestor was the same Richard H. Dana whose sea saga had been my inspiration. Then and there, Alice Washburn became the skipper of our yet-to-be purchased craft, and I the only mate. For we felt that, with the spirit of Dana guiding us, we would need no other hands.

We cast about for a boat early in the winter, and opened a correspondence with several yacht agents for a small but seaworthy vessel capable of being handled by two women. In between long, cold and fruitless journeys to shipyards from City Island to Greenport, I read tomes on the selection of small boats, all of which discussed as the ideal type of sailing craft for the person of modest pocketbook a cruising sloop or yawl that need not exceed, say, 30 to 35 feet in length, and may be bought new for as little as $4,500 to $7000, though it is perfectly possible to buy a used boat (of this extremely modest size and cost) for as little as from $1500 to $3000.



The cabin of "Scud" is a cozy place

* *See* YACHTING, *July, 1942*

Loafing along before a light breeze in St. Andrews Bay, N. B.

When we saw the sloop, sitting in chocks, with jib and mainsail set, on the floor of the Grand Central Palace, we knew that she was ours! She was 18 feet long, of 6 foot beam, and drew, with the centerboard up, 11 inches. And she was in Our Price Range! That she boasted no cabin was of minor consideration since the skipper, who had another ancestor who had been a ship carpenter, was apparently perfectly capable of whipping one together, herself.

Though I learned, that winter, to wield a palm, to worm, to parcel and to splice, one day it occurred to me that little thought was being given to the comforts of living on the boat. We spent hours discussing stress and strain and cambers and cleats but never once did we mention breakfast, lunch and dinner and possible illness. Rockwell Kent says, "Too often is a boat's *inside* neglected although the value of living is conditional upon how." I felt that the same was true of the crew's inside, and assigned myself the position of purveyor. Fortunately, the corner grocer had some experience victualling a customer's trailer and, between the two of us, we made up a list that was passed by the skipper and my husband.

When, for the first time, I saw *Scud* lying in the shipyard at City Island, my heart quailed. Eighteen feet! My God! She had looked large and trim and yachty in the Grand Central Palace but, in the yard, she looked no bigger than the canoes racked up beside her. There was a stiff breeze and a heavy sea running in the Sound that May morning and my stomach turned turtle as I imaged her attempting to breast even those small swells. No husband, I thought, would ever countenance his wife putting to sea in that and, for once, without being urged, I would agree with him. But my husband was going into ecstasies over her, while the skipper beamed and murmured, "Oh you beauty!" — Well, after all, I reflected, *she* was the nautical member, and my spirit lifted.

But my rally was short-lived. The owner of the yard, an un-taciturn but melancholy fellow, did his best to infect me with his chronic despondency. At first, I thought he had gloomy ideas of mariners in general. He was a mine of forebodings, a treasury of disasters, a library of distressing narratives. As we bargained with him for mahogany and pine, tales of leaky cabins, founderings and swampings flowed in dismal currents and a strong Teutonic accent from his slips. Strange to say, all the selections he gave us had reference to *female*-owned craft and homemade cabins. After selling us all we required — and I must say, at a fair price — he shut himself in behind his shop window from which, all day, I could feel his depressed gaze on us as we worked. It was the skipper's chisel that finally brought him round. "By Gott," he whispered, as he tried it on his thumb, "If she can sail like she can shisel — By Gott, maybe you do it, at that!"

Scud was launched on June 22nd and there was a nice little SW breeze that filled our sails and promised to carry us, in no time, over to Little Neck Bay where we were to lie until my husband could bring us the tender, the outboard and such articles as we had not already stowed. The sun shone, the sea was a deep blue with an occasional whitecap, and the sky was almost cloudless. Soon our well-wishers on the wharf were mere dots. I was preparing to enjoy my first sail in my own yacht when I noticed that we seemed to be traveling faster sidewise than ahead. Now I know there is a certain amount of leeway to be expected from a sailing vessel but, in the yawl, it was almost imperceptible except to the man at the wheel. I decided that smaller boats must be different and was lazily wondering how I was going to enjoy cruising crabwise up the coast when the skipper, who, ever since we had hit the water, had been ducking into the cabin while manipulating tiller and main sheet with one hand, suddenly pointed and screamed. A hundred feet ahead to starboard, in which direction we were sliding fast, rocks, like jagged teeth, showed themselves above beerish foam.

"Centerboard won't drop" she yelled. "Can't even luff her — we're going to —"

Crash! With less than five feet between us and the leering rocks, the board dropped with a jar that shook the boat. Instinctively, I dropped to the bottom of the cockpit and closed my eyes. Could a centerboard drop clean out? If it could, this had. I waited tensely for the next crash to tell us we had hit. . . . Nothing happened. I opened my eyes. The skipper was grinning broadly.

"Nick of time," she said. "That's the grand thing about sailing. Such unexpected things are always happening."

Several days later, an over-night trip on the Sound proved to us that our seams were tight, that our dunnage provided just the right amount of ballast, but that we were overcanvassed, and that our semi-genoa was practically useless when working to windward. However, reefed down in a stiff breeze, she handled nicely and the skipper, with shrewd foresight, had provided a working jib. Our pipe berths and sleeping bags were comfortable and, though we spent the night in a busy harbor, we proved that we could live in complete privacy from each other and the eyes of the nautical world in our marine cloisters on either side of the centerboard trunk. Our Swedish primus, in its asbestos-lined container (an invention of the skipper's) not only boiled and fried in record time, but was capable of heating our Dutch oven and our cabin as successfully as any galley stove, and had the advantage over that more elaborate article, of being movable. We could prepare our meals either outdoors or in, as the weather dictated. But the really important discovery we made was that our sloop, despite her diminutiveness, was as seaworthy as any vessel twice her length and draft.

The 26th of June found us as ready as we ever would be to start on our cruise. We were stowed and organized down to the last cup and spoon. Charts, that would take us far up the New Brunswick coast were arranged in sequence on an ingenious rack suspended forward, and of easy access from the narrow passageway between the berths and the centerboard trunk. At the foot of each berth were duffle bags containing the crew's sheets, towels, night gear, sailing clothes etc., and dressing cases which held hopefully non-crushable, eye-appealing apparel that was to impress the natives whose shores we might choose to explore.

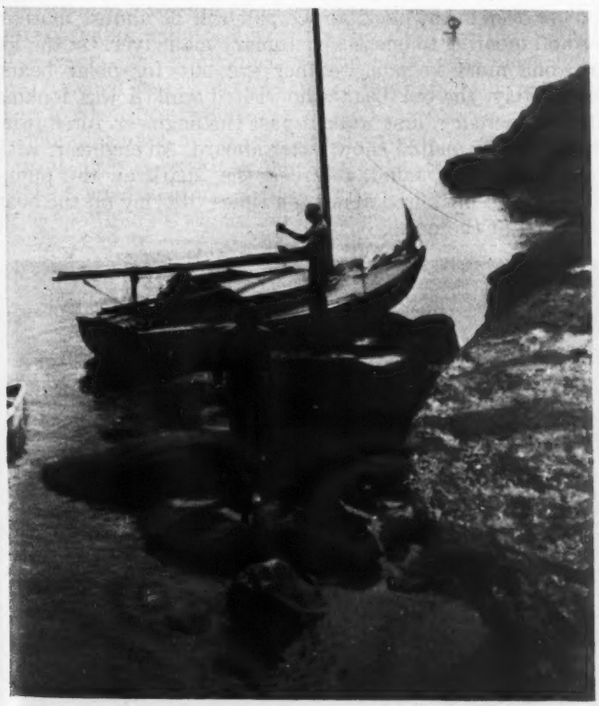
We rendezvoused at Manhasset aboard the yawl, from

whose ice chest we removed our beef, vegetables, eggs and other perishables, and stowed them in one of our cockpit lockers, since our little craft was equipped with no refrigerator. An hour after sunrise, *Scud* sailed away from the yawl's jigger boom to the wild cheering of my husband who had recently contracted for a rather impressive policy on my life; soon she was tacking for an offing well out on Long Island Sound.

Objective point of that cruise? There was not any! Where were we going to, and when arriving? We did not know or care. Ask a pair of imprisoned monkeys with the door of their cage wide open, a cocoanut grove in the far distance, to give you particulars of their intended movements. It might be the Isles of Shoals, North East Harbor, Bay of Fundy. We were a duet in perfect harmony, tired of teaching children and managing a household. We wanted release from convention and its monotony of application; in fact, we were in for a good holiday and meant to have it.

The important galley duties fell to me and I saw to it that we had at least four meals a day. Breakfast at six, or thereabouts, was a leisurely and hearty affair of cereal, eggs, bacon, coffee and toast. Luncheon, at noon, usually consisted of biscuits, sardines, tinned meat or cheese, and canned soup that had been heated while we consumed breakfast and kept hot in a thermos. Around five, if the wind were light, we brewed tea and baked biscuits or johnny cake, otherwise we washed down our hardtack and jam with the coffee left over from breakfast. But our dinners, when lying at anchor, were a series of Lucullan feasts. Such chowders and pot pies were concocted from the various stores at our disposal! Our appetites were outrageous and, before we had been 48 hours at sea, I was fearful of famine. What saved us was the mackerel that, as far east as the Cape Cod Canal, were running thick that summer. It may be doing an injustice to many highly capable towns situated on the coast but Sakonnet meant to us lobster; Mystic, steak; Kittery, a cool salad; and Cutler, apple pie. To us they were only the provisioning stations providentially scattered around to furnish our menu.

To this general statement, however, there were some exceptions. Brenton Cove meant to us a port to be avoided in anything less elegant than Cleopatra's barge. We had started this cruise, it is true, with only the fixed purpose of floating where we listed, utterly forgetful of a port until the sloop's bottom should be inches deep in barnacles. But I, as the only family woman of the crew, could not be completely apathetic in this surcease from active responsibility. Newport had been designated as a station where reports of my dear ones' welfare could be collected.



Landing along the shores of Passamaquoddy Bay

Drying sails while waiting for the tide to float us off

We sighted Point Judith in the early evening of the 3rd of July. Elated at the ease with which we doubled that point which I had supposed was almost as difficult a task as to round the Horn, we decided to keep on to our destination. But our elation was soon deflated. The wind died, darkness set in, and the sea, whipped by the NE breeze which we had been bucking for nine days, rose alarmingly. By ten o'clock, we had not yet sighted the lightship and, depressed by the cold and the heaving swell that was tumbling us uncomfortably, we decided to call it an emergency and resort to our motor. But, alas, we were sailors and, though the intricacies of our outboard had been carefully explained by the man who sold it to us, we had grasped little beyond the fact that it ran on a mixture of gasoline and oil and had to be started with a cord. And nobody had warned us of the hazards of unshipping the rudder in a rolling sea before transferring the outboard from the locker to the transom. The little ship, with rudder gone, turned broadside to the swells and we were drenched with spray and nearly rolled over before accomplishing this two-woman feat. We lost the cord at the third try, when the wet plugs short circuited, sending us caroming about the cockpit. We might have been there still except for a zephyr that sprang up from nowhere, and at 2:00 a.m., in a half-drowned condition, we heard the bell and identified the light off Castle Hill. So we decided to put in to Brenton Cove where, thoroughly exhausted and chilled to the bone, we kicked off our sneakers and crept between the blankets, fully dressed, to dream of a better morrow.

We shall remember, always, the sight that met our eyes when we hit the deck next morning. With an utter disregard of the affairs of the rest of the world which seems to afflict all true mariners, we had forgotten that this was Cup Race year. What we had taken to be a wharf, in the stygian blackness of the night before, was that aristocrat of yachts, *Atlantic*, and the cruiser, alongside of which we had dropped anchor, but one of her many tenders. Our modest little craft had blundered on a noble rendezvous. We lay, a common hub, rimmed round by such grandees as *Ranger*, *Rainbow*, *Vanitie*, the two *Endeavours*, and the *Yankee*. And not a

(Continued on page 62)

Official Photographs, U.S.S. "Northland," C.G.

The "Northland" moors to an ice pan in the middle of the Arctic pack. Calm water is the rule in the pack although a heavy storm outside will start a swell

ARCTIC NAVIGATION

By CARLTON SKINNER, Lieutenant, U.S.C.G.R.

Navigating Officer, U.S.S. "Northland," C.G.

THE ARCTIC navigator has an easy life. In the summer, there are no stars for star sights. In the winter, he gets his morning star sights after breakfast and his evening star sights in the afternoon watch. What a wonderful opportunity for sack drill!

But, somehow, small flies immerse themselves in the ointment. There are no lighthouses, buoys or radiobeacons. The coastline has a deadly uniformity of variety — all peaks and fjords that look as if they were turned out by machine for a Disney extravaganza. The charts are marked:

THIS CHART IS FROM INCOMPLETE SURVEYS AND SHOULD BE USED WITH CAUTION

And they mean just that. Islands are likely to be ten miles out of place, if there at all. Harbors have never been surveyed. Some of them have never been used before.

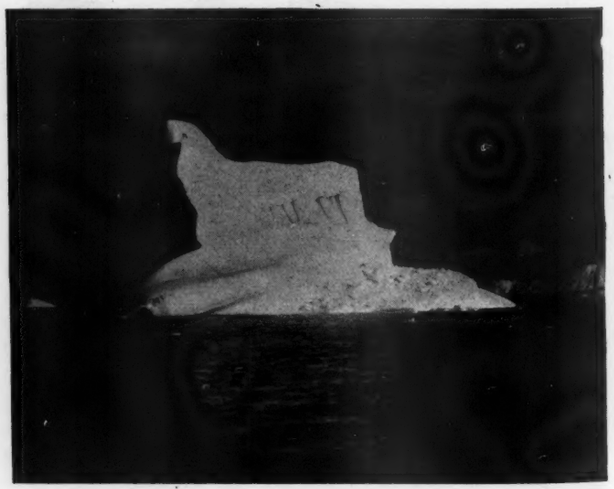
Then there is ice. You see so much ice on one of our ten-month Greenland patrol cruises that you develop a fondness for *warm* Scotch and soda. And each kind of ice requires different treatment. There is *Storis* (Danish for large ice), winter ice and sea ice. There are icebergs, floebergs and growlers. The last named is not an Arctic navigator at the end of a ten-month cruise; it is a small chunk of ice, either broken from, or the puny remains of, a large berg. And ice produces fog. This is simple. When warm air flows over cold water, fog appears. Ice, for some obscure reason, tends to cool the water.

The *Northland* has lain for weeks in the ice pack with a bright sun overhead and a thin wispy fog draped around the horizon. That is when we break out that simple instrument so highly recommended by Squire Lecky, the Artificial Horizon. If you don't have the mercury and tray, you can use molasses in a saucer, according to him. I've used the motionless water beside the ship and gotten excellent sun lines.

Icebergs assume fantastic shapes as they are eaten away by the waves

Bowditch has a clear and complete description of its use. Be sure you apply your index error to the double altitude before halving it. If there is some vibration, as when taken on deck while the auxiliaries are running, a fair sight can be obtained by superimposing the reflected image on the direct image. This, of course, eliminates the need for a correction for semidiameter.

The mercury and tray are best used on a large pan of ice. The ship's auxiliaries produce quite a bit of vibration. If you are deep in the pack, an ice pan will be almost motionless and mooring to one is a customary maneuver. On the ice pan, one must keep a weather eye out for polar bears. Fortunately, the one bear who visited while I was looking into the mercury, first walked past the engineer force, who were pumping melted snow water aboard. An engineer, with great presence of mind, retarded the spark on the pump engine and it backfired about ten times, driving off the bear in disgust at the noise.



The Coast Guard Cutter "Northland" breaking her way through new fjord ice off Greenland

Celestial observations are no more difficult above the Arctic Circle than anywhere else. Polaris is high. In the spring and fall, you cannot afford to discard observations of the sun of less than 15 degrees altitude. When the meridian altitude is but seven degrees, and you've had fog for three days and nights, you take the seven degree altitude and forget all about complaints to the rules committee. Also, don't be supercilious about star sights with a moonlit horizon. They can be most valuable. You should be sure that you are familiar with some system other than H.O. 214, because that cannot be used for altitudes of less than five degrees.

Azimuths are like Mohammedan genuflections toward Mecca. They must be taken at every possible moment. I believe Mr. Dutton is the one who admonishes us to take an azimuth with every sight of a heavenly body. Observe faithfully. If you have a gyro-compass in northern latitudes, it is likely to shift its error on you. If you are using your magnetic compass, it is bound to shift its error. If some purist wants to argue that a gyro-compass is perfect, remind him that, at the end of ten months, the mercury is fairly grimy and some of the principal parts are badly worn.

As long as you are taking your azimuths frequently, H.O. 214 provides a simple and convenient azimuth table. It should be checked from the Red Azimuth tables (H.O. 71) when you have a reliable position. The textbooks advise that you can determine compass error by plotting bearings on a trial method until you arrive at the right error (or left error). That is fine — but be sure the chart is accurate.

Coasting along a rugged mass of grey peaks and valleys requires constant attention and study. There are no friendly lighthouses, Coast Guard surf stations, water towers or church steeples which can be positively identified.

We fix position by constant tangents on points and islands, bearings on peaks and fjords. It may not sound like good practice to use the mouth of a mile-wide fjord for a bearing but, when you are ten miles offshore with a high overcast, it is remarkably helpful. For this sort of piloting, photographs of entrances to important fjords or harbors are most valuable. A pencil sketch of an island or headland will frequently help to identify it the next time in.

Soundings are one of the principal aids to navigation in Greenland waters. Along the west coast, there is a string of banks which, in thick weather, give you latitude positions from the time at which you cross the 50 fathom curve. Lt. Commander F. C. Pollard, captain of the *Northland*, has been around Cape Farewell a dozen times and seen it only twice because of the frequent fogs there. But you can round it in perfect safety by staying outside the 100-fathom curve.

At this point, I wish to express myself on the canard about the Coast Guard and "shallow water sailors." The *Northland* has been in plenty of 2000-fathom water and her area of operations is from 2000 to 3000 miles from her home port.

In fact, the Coast Guard has nursed Greenland along from a closed Danish colony, entered by less than a half dozen strangers each year, to its present status as an important air base for the United Nations.

Last summer, a Navy PBY on patrol flight sat down in an obscure native village on a desolate stretch of coast. The Greenlanders surrounded the plane in their umiaks, displaying their customary polite but unrelenting curiosity. The Navy photographer wanted a picture of these children of nature who had never before seen white men. He engaged several of the young girls in sign language conversation preparatory to flashing a devil-box camera on them. Finding that they got along well in English, he asked if they knew what his uniform stood for. The native girls beamed and nodded vigorously. "You Coast Guard," they said.

The poor charts create both hardships and opportunities. A navigator in these latitudes can engage in unlimited surveying. A mere recording of soundings when you have an accurate fix offshore is valuable. There are any number of small bays, inlets and fjords which need to be surveyed. Few naval vessels in time of war have opportunity for a thorough survey, with triangulation and wire-dragging. For practical navigation, you can do a lot with a hand lead and a stadimeter. Cut the position of the ship in on the chart with bearings on points or islands. Then take the sounding party out in a motor boat. Head for a point or rock and wave a flag every time you take a sounding. A quartermaster on the bridge can take a bearing on you every time you signal. At the same time, you get your distance from the ship by stadimeter. Do that in enough directions from the ship and you have the harbor sounded. Run slowly along the shore and cut in the three-fathom curve and in a day you have a rough sketch which will allow you to anchor in the most favorable water the next time you come in.

Ice navigation has been covered by expert oceanographers. There are two principal things to remember. First, if the ice pack closes in around you, you are crazy to go butting around trying to get out. Have patience. The wind or current may open up a lead in an hour. Second, an iceberg is more affected by current than by wind, because the greater part of its volume is below water. You can frequently tell when you are approaching the ice pack. It reflects whatever light there is into the sky just above the horizon, providing an "ice blink." Thus, in a fog or at night, if one sector of the

(Continued on page 90)

Greenlanders surround the ship whenever she enters a village port. The large boats are umiaks, the women's boats; the single seater is the famous kayak

Wide World

Anti-aircraft fire from units of the United States fleet and a transport announces an attack by Japanese bombers during American landings at Guadalcanal

GUADALCANAL FERRY

By D. H. DEXTER, Commander, U. S. C. G.

ONE OF the most difficult tasks in a discussion of recent military and naval operations is to be able to do justice to the heroic work of all involved and at the same time refrain from disclosing any military information which might be useful to the enemy.

This is especially true in a discussion of small boating in connection with landings and operations on Guadalcanal. My respect for the crews who operated and maintained the landing boats which were used in the seizure of Guadalcanal is indeed great. There, too, can be no limit to the amount of praise due the Marine Corps who, under the direction of Major General A. A. Vandergrift, did everything possible to coöperate with and to assist in the maintenance and operation of these boats.

The boats used were early editions of the standard type landing craft; all but a few of them were manufactured by Higgins Industries of New Orleans. Those few that we used which were not manufactured by Higgins were made by Chris-Craft. They were powered by Hall-Scott, Superior Diesel and Gray Marine Diesel engines and had been in operation for approximately one year. Therefore, under normal circumstances of war service, they would have been considered worn out.

Planning in advance as to what equipment should be taken in and what equipment was available in the locality at the time was a big job but, when the day came, we had a large stock of spare parts and miscellaneous equipment. This was ferried in and placed on the beach right after the assault, and the boats continued to carry out their regular operation of transporting ashore the secondary personnel and equipment. When the transports finally sailed, we had quite an array of gear and boats and believed that we had practically all the parts we would need. We soon found out, however, that we would need more of some items and less of others. We also had the salvage work of a fair number of boats which were high and dry; some of these, to the best of my knowledge, still remain as monuments of their ability to take it.

Our boats were utilized for many and varied duties, some of them monotonous, such as unloading cargo from ships, for raiding expeditions and for the recovery of pilots — both American and Japanese — who succeeded in bailing out from their planes before they crashed into the sea. To a boat crew who loves to see their boat kept in shipshape order, this duty was a headache, for a plywood boat which is operated on and off the beach, even though it is a beautiful sandy one, is impossible to keep clean. Moreover, the transportation of all types of machinery, vehicles and rations rapidly adds definite scars. It was also almost impossible to save the boats from considerable damage. They would go alongside of the ships, from which a cargo net full of equipment would be lowered, and the crew of the boat would hold their bobbing little craft as steadily as possible while the cargo was stowed. This process was repeated until the boat was loaded.

We found the maintenance of the boats our biggest problem. No work could be done after sunset, as the movement of personnel and equipment was restricted, but by continuous and diligent work on the part of the small repair gang who "turned to" at the break of dawn and were constantly on the go until it was too dark to see, we managed to keep approximately 80 per cent of our boats in constant operation.

One of our greatest difficulties was the procurement of

(Continued on page 73)

The successful landing of supplies sufficient to sustain a large body of troops involves planning, skill, perspiration — and luck. Press Association photo

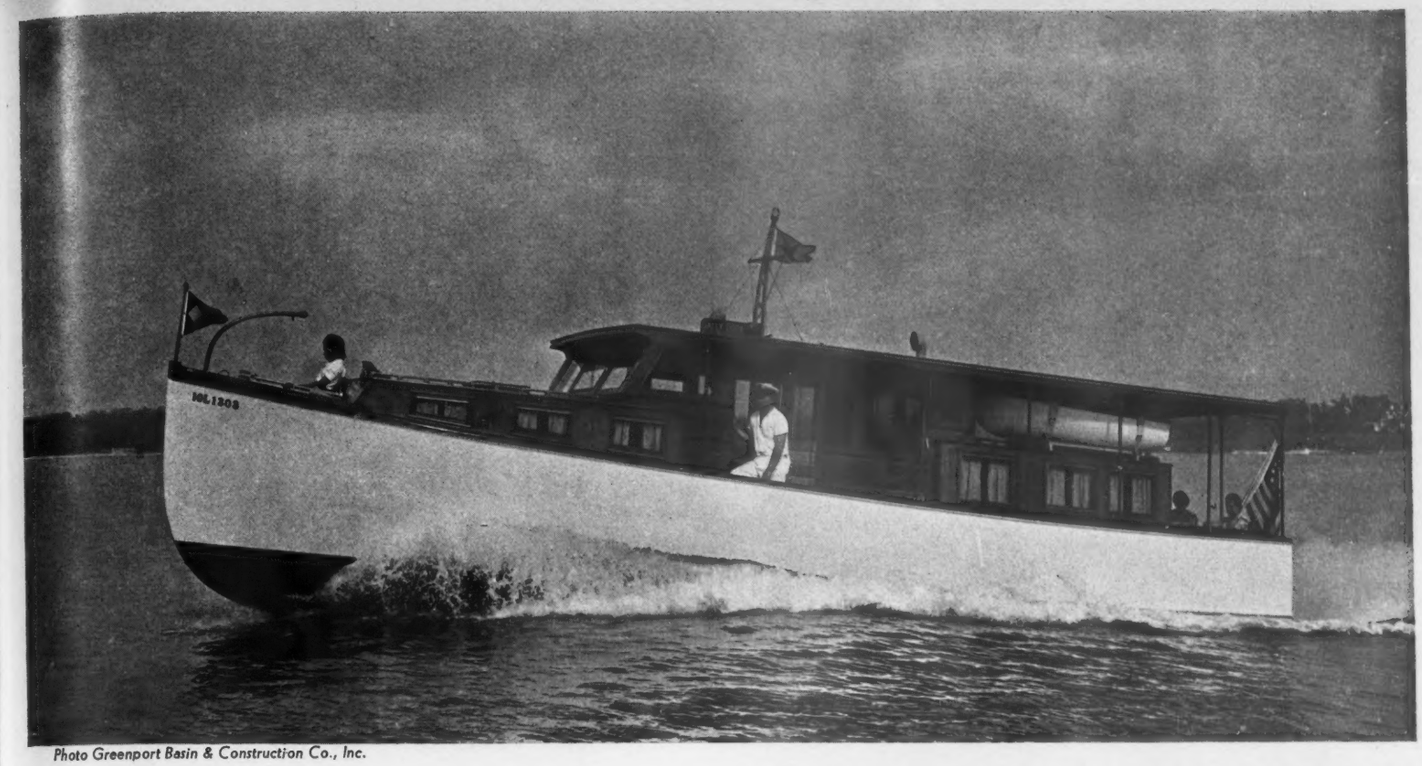
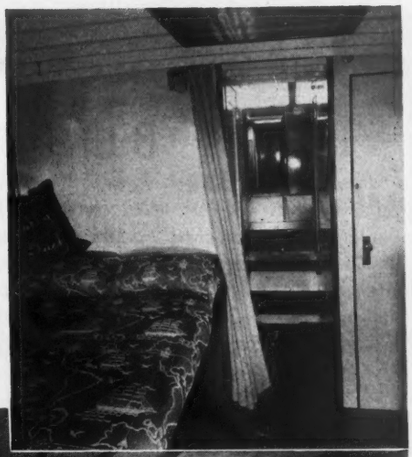
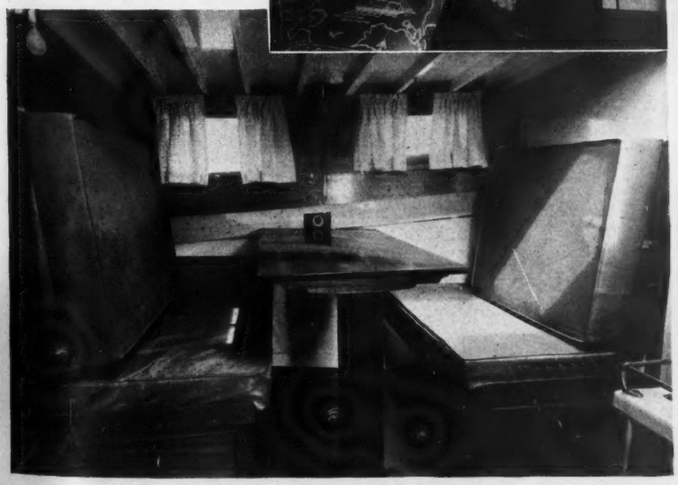


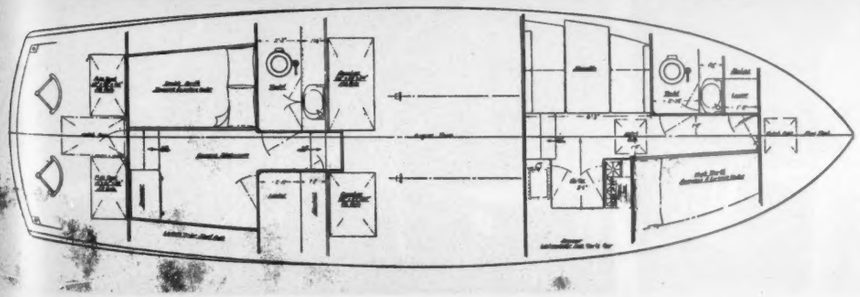
Photo Greenport Basin & Construction Co., Inc.

"SALLY DUCK"

The last yacht built by Greenport Basin & Construction Co., Inc., she was designed by Theodore W. Brigham for F. M. Glynn, an experienced engineer, who devised many ingenious gadgets for her. The dinghy, for instance, hoisted in on rollers, and the folding bunk in the deckhouse, to mention but two. Every inch of space is utilized to advantage





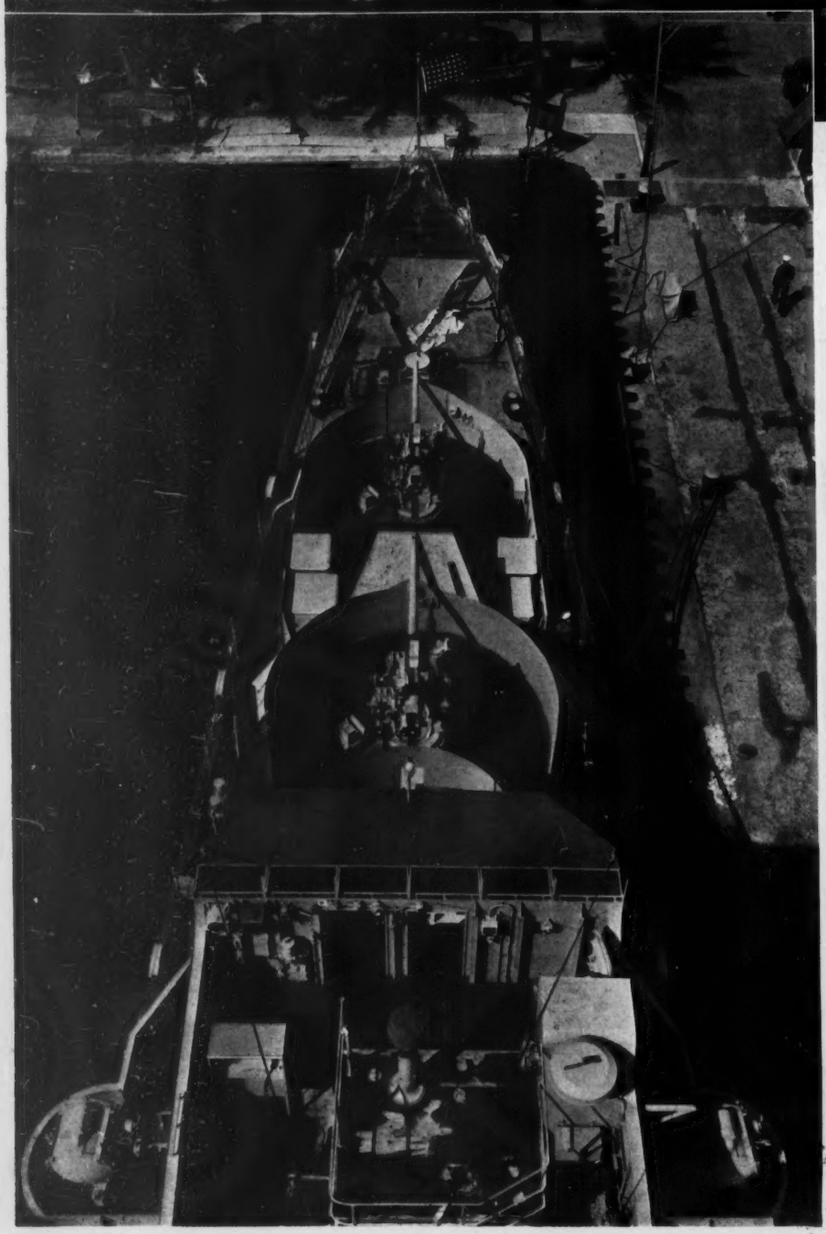


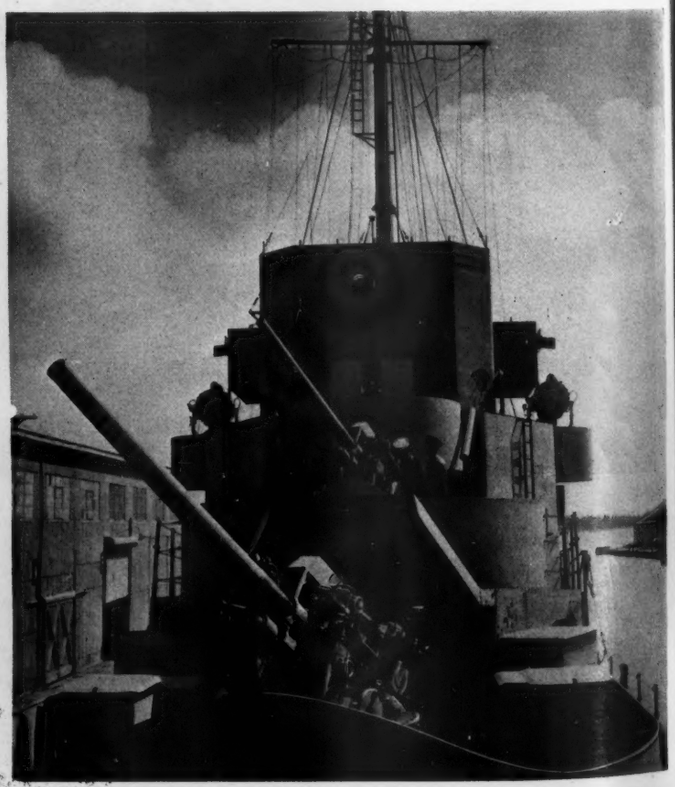
"Sally Duck" is 42' 0" in length over all, 40' 4" on the water line, 12' 6" beam and 3' 0" draft. Two 8-cylinder Chryslers drive her at a15-knot pace

Official U. S. Navy Photos

TRIM BUT DEADLY

No skipper of a Nazi unterseeboot need blame superstition as a reason for steering clear of DE 13! Like the hundreds of her sister ships, this new Destroyer Escort is fast, sleek and powerfully armed. This is the Navy's latest answer to the convoy problem, and is a type on which great dependence is being placed to whip the submarine menace. Armament includes dual purpose cannon, 20 mm. AA guns and depth charges

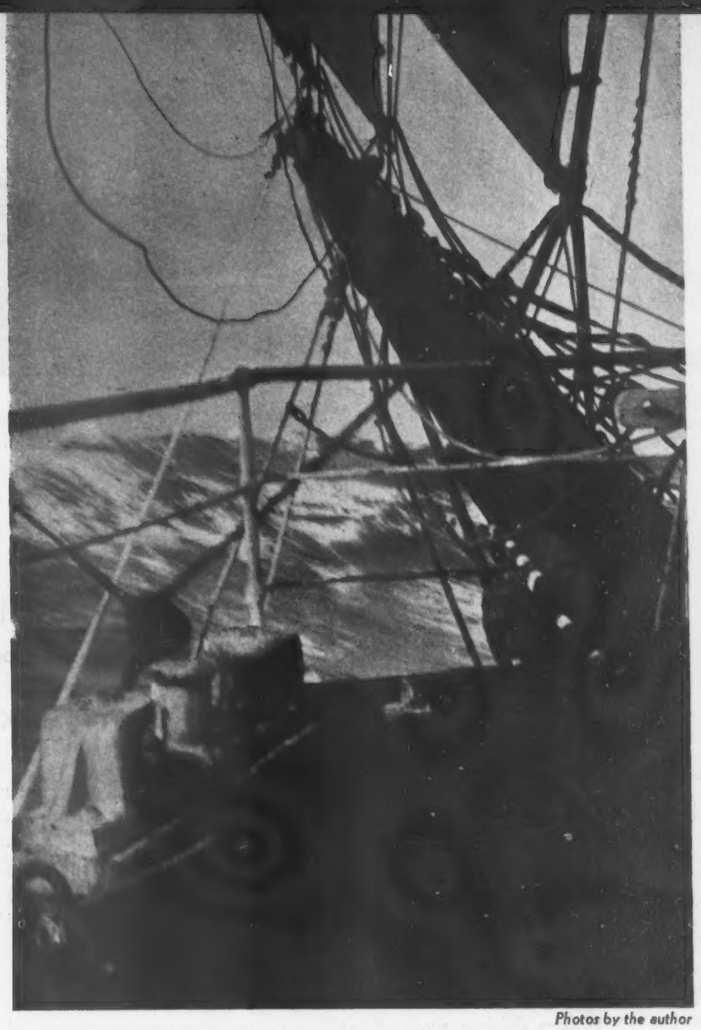




ALONG THE ROAD TO RIO

A Big Four Master Tries Conclusions With a Steamer in the Atlantic

By GILES M. S. TOD



Photos by the author

"Herzogin Cecilie" drives along in a freshening breeze at a 15-knot pace

NOTE: The four-masted steel bark "Herzogin Cecilie," of 3111 tons and 334 feet long, was built in Germany in 1902 as a training ship. After the war, she came under the Finnish flag, sailing in the grain trade until her end on the rockbound coast of England in 1936. A strong ship, her best day's run was 365 miles and on one occasion she made 21 knots. Few sailing ships could hold their own with this magnificent square-rigger. An account of one of her visits to Sydney, Australia, a number of years ago appeared in the February and March issues of YACHTING.

ABOARD the *Herzogin Cecilie*, October 14th, somewhere in the South Atlantic. Coming back on deck at eight bells (midnight), I find that it is blowing harder, with a fine rain driving before the cold wind. The other watch has taken off the royals and we are staggering along. The deck is at a sharp angle so that dark seas lunge across the well deck rail from time to time, to break in phosphorescent showers around our feet.

In the blackness I can vaguely discern both watches standing by the break of the poop, waiting for the mate's word to relieve the wheel and the lookout. Looking down over us he counts heads; we are all there. His voice rises above the whine of the wind in the rigging: "All right, free watch go below."

The little group of oilskinned men disperses, some going to the forecastle to turn in, others tramping forward to the shelter of the forecastle head. As it is my wheel I slither down to the lee poop ladder and work my way aft to the helmsman. In a hurry to get below he quickly slips the canvas safety belt over my shoulders and sings out the course: "Full and by, or southwest if she'll make it." Then he is gone and I am alone.

In the "Roaring Forties," under topsails, foresail and a few jibs and staysails. The howl of the wind did not register in the photograph

The compass card slowly sways back and forth as the bark rises and falls in the seas. The wind, hauling a little, lets me hold the course but it's not easy. The wheel is heavy, even kicking at times, and it takes all my weight to bring it up. I am soon hot from the work though it is a cold night. The rain is refreshing but it does not last long. Peering aloft at the mizzen upper to'gallants'l I see a star or two between the clouds. Above me towers the web of rigging and white canvas; the silent, drawing sails hold me almost spellbound. Every now and then I glance at the compass and then around at the dark horizon. Suddenly, a white light appears far astern. At first it comes and goes; a low star, perhaps. Then it remains and, as it becomes brighter, I see that it is the masthead light of a steamer following in our wake. I give the wheel's bell a loud clang to call the mate who is reading in the charthouse.

A moment later, his dark form is groping towards me. He glances at the compass, then aloft at the sails. The breeze, as it freshens, hauls more in our favor. I have no trouble, now, holding the course. The yards are braced up sharp on the backstays but the mate blows his whistle to call the watch aft. As the men come trooping up, he gives his orders: "Mizzen weather braces . . . and look lively!"

From my post I can hardly see the men although their shouts and calls as they haul away are clear. "Heave up . . . Ho . . . Haul away . . . Let's go . . . Come again . . . Once more . . . Heave . . . Make fast."

(Continued on page 64)

Official U. S. Navy Photos

Approximately twenty landing barges of various types swarm about a mother ship off Safi, French Morocco, during the American landing operations in November, 1942

FIRST ASHORE AT ALGIERS!

An Eyewitness Account of the Dramatic Part Played by the Coast Guard in the Now-Famous Storming of the North African Coast

By ALBERT A. HECKMAN, Ensign, U. S. C. G.

ALREADY the stories are being told and the legends are growing about the landings of American troops in French Morocco. We are hearing every day of Casablanca, Safi and Oran. This is the tale of Cape Matifou and Ain Taya in Algeria, of the men who landed there, and of the ships that brought them. More important, it is the tale of a ship, a naval transport manned by Coast Guardsmen.

\+ + +

Before sailing, we had carefully stowed a steady stream of stores, guns, tanks, ammunition, vehicles and the thousand and one miscellaneous items necessary to maintain an army 4000 miles from home. Finally, the Rangers came on board, dressed in coveralls and helmets, with heavy packs and Tommy guns slung over their shoulders. Upon assignment to the troops holds, they immediately fell into the routine of the ship for they had been trained over 22 months in amphibious warfare. On a foggy September morning, the ship slipped her moorings and stood out to sea. Big and gray, her rigging wet and dripping, she headed the convoy column, flying the pennant of the division commodore. We did not know where we were going; all we knew was that Army men aboard were in our charge for safe transportation and were to be landed on a foreign shore.

Always the "tin cans" zigzagged around us; always the commodore fingered his stop watch; the captain paced the bridge; the ensign dined on his finger nails; and always the soldier and sailor wrote his girl. But one day was different from the rest; that day brought us into an Atlantic port. Incorrect stowage of our equipment had brought us there for still further preparations before we sailed for keeps. Our ship was to be unloaded by landing boats (probably while under fire from the beach) and it was, therefore, necessary to load the equipment in inverse order of its use. Hence, we had to discharge our entire cargo as well as the troops. The soldiers went to a camp to maintain their high peak of physical fitness, and the jeeps went on the dock to have their exhausts and carburetor intakes modified for desert warfare. With that came our first inkling of an ultimate destination.

Eventually, the jeeps, troops and cargo were reloaded and, shortly thereafter, we found ourselves in another port for two weeks of full scale maneuvers. Our Rangers participated in these exercises with relish for it was their final dummy run before the real thing. Transports lowered and landed boats more quickly, beach heads were forced with greater speed, and men soaked with mist began to feel that the split-second perfection of an amphibious landing was near at hand.

Finally, after all these weeks of eager waiting, our ship had fuel pumped into her tanks and we were informed of her place in the invasion convoy. In addition to the usual scuttle butt rumors, all signs pointed to Africa. The newly sandproofed jeeps, the light clothing, mosquito bars, sun and sand goggles, the inoculations for malaria and sleeping sickness, and the salt tablets were fine indications that we were going some place in Africa.

From the escort we had, one could easily see that we were "big stuff." The gray of the American transports division

(Continued on page 82)

Left, supplies are unloaded into barges from a U. S. transport during landing operations at Fedala, about 15 miles north of Casablanca. Note the anti-aircraft guns mounted on the barge's after deck. Right, a new wave of U. S. troops streams ashore through the surf off the French Morocco coast near Casablanca. The surf was considerably heavier than this photograph indicates, and the heavy pattern of footprints indicates the number of men already ashore

OPEN BOAT CRUISING

By HAM de FONTAINE

PERHAPS, when the word cruising is mentioned, your mind turns to sailing the sea to foreign ports, or to ranging the Maine Coast in an able, and comfortable, cruising boat. Surely this is the peak of cruising pleasure but, in these days of restricted areas and restricted personal budgets, there is another kind of cruising that has been overlooked by many a deep water sailing man. I refer to small, open boat, alongshore cruising. To be sure that sense of accomplishment that comes from a successful cruise to Nova Scotia, Bermuda or Hawaii is missing, but there are many compensations to be had from poking along the shore of river, lake or sound in a small boat. The sunrise and sunset, the thrill of sailing in a rail breeze, the eternal combat with mother nature and, perhaps most satisfying of all, that feeling of being complete in command are there in the little fellow as well as the big one.

The pleasure of exploring out-of-the-way places can be yours in a 16-footer as well as a 60-footer. The distances will not be so great but the time element will be the same, and the health-giving summer air and sunlight play no favorites. Fish bite as well, or perhaps better, for the angler in a small boat and, the menu being necessarily more limited, taste much better to the fisherman.

I had my eyes opened to the possibilities of small boat cruising a number of years ago, when I purchased from Linton Rigg one of the 12-foot Bermuda dinghies which he was importing from England at the time. She was a beautifully built little boat, one of the finest that I have ever seen, but she was heavy according to our standards. When I mentioned this to Mr. Rigg, with the remark that she would be hard to tow and to take aboard, he replied that in England these dinghies were not regarded as yacht tenders but as little yachts in which their owners frequently made extended cruises alongshore, and even crossed large stretches of open water. While I never cruised in her, I did have an excellent opportunity to test her ability as a sea boat one October day, when I logged ten nautical miles in two hours flat, before a muzzling nor'wester and what seemed like mountainous seas. With a double-reefed mainsail, she handled well and took not a drop of water aboard. After that experience, I had no doubt that one could cruise in safety in one of the little boats. In fact, I have been told that a hardy sailor made a cruise from Manhasset Bay to Shelter Island and back, a distance of about 160 miles, in one of the same class.

There is nothing new about cruising in small boats. In 1926 YACHTING ran a story about Linden Pentz and his wife, who, with their baby, a goat — carried for the baby's milk — and an Airedale and a cat made the voyage from Seattle, Wash. to Juneau, Alaska, a distance of 1000 miles, in a 16 foot open boat. Then there are the spectacular voyages of the venturesome Captain Voss, and many other long cruises in short boats on record. In recent years, for example, there was the cruise of Slade Dale and Frank Coyle from Bayhead, N. J., to Florida in 12-foot sneakboxes and in the summer of 1941, Liggett Gray and his wife sailed from Riverside, Conn., to Monument Beach, Cape Cod, and back, a distance of approximately 360 miles, in a 22-foot open boat (see YACHTING for August, 1942). Frederick Fenger cruised in the West Indies in a 17-foot canoe and wrote a most interesting book about it. Many of our English cousins have made voyages in open boats, one of the best known being Uffa Fox and his cruise from the Isle of Wight across the English Channel and along the coast of Brittany in a 20-foot sailing canoe of his own building. Much can be learned about open boat cruising by reading the stories of these cruises. I will try to give you a few pointers on the subject gleaned from both personal experience and from reading the other fellow's yarn.

Obviously, one should not attempt long passages in open water unless the boat is entirely seaworthy. You might "get away with it" but you also might cause the Coast Guard a lot of trouble and wind up with your name in the obituary column. If you plan to go off in a 16-foot centerboarder, I advise you to hug the shore and be in a position to duck in to a harbor at the first sign of trouble. Be particularly careful on large lakes as many of them are well known for their propensity to sudden and devastating squalls, which will dump the unwary into the drink in jig time.

The question of a suitable berth for the night will depend very largely on the kind of water on which you are cruising. If you were on the Maine coast with its great range of tide, its rocky, seaweed covered shores and its innumerable snug anchorages you would probably elect to sleep aboard, unless, of course, the boat was so small as to make this impractical. It would be an easy matter to put in to a quiet cove and anchor in close to the sheltering shore for the night. Or one might find a float to which the owner would allow tying up. This would be a welcome arrangement as it would permit

Two little sneakboxes in "dry dock" after a long voyage

Drying out in a well-sheltered spot

taking a pleasant walk in the pine scented air ashore. In regions where the shore is flat and sandy, one might elect to pull the boat up above the high water mark and pitch a tent. This would also probably be true on rivers and lakes where the tide is no problem.

With the exception of your navigating equipment — compass, charts, parallel rules, dividers, tide tables, etc. — practically all the gear required is for camping and will be found in the catalogs of the well-known sporting goods or mail order houses or from L. L. Bean of Freeport, Maine, who specializes in supplies for the camper.

One of the first considerations of the small boat cruiser is a suitable shelter for the night. This subject was pretty well covered in my article in the April issue of YACHTING. In addition, however, there is the possibility of using a tent pitched on shore. For the boat of less than 20 feet over all, this has much to recommend it, as the room in smaller boats is so restricted that the crew becomes pretty cramped, unless they get ashore at frequent intervals to stretch their legs. There are many kinds of tents to choose from, and your choice may be determined by the tent you own, or can borrow. If you have a selection I can recommend the type known as an "Explorer's Tent." This tent is light, roomy, and has a sewn in canvas ground cloth and mosquito netting front, with a zipper, which keeps out undesirable visitors, also a canvas fly which may be rigged as an awning over the entrance. I spent several nights in such a tent recently, and on one of the nights it blew and rained hard without causing us any real discomfort. Such tents sell from about $35 up. If rain threatens when you are pitching camp it is a good idea to dig a shallow trench around your tent to carry away the water.

After suitable shelter, the question of sleeping is probably next on the list for consideration. It is my belief that the most suitable and comfortable bedding is an air mattress, blown quite hard, and an unlined sleeping bag, the latter equipped with a zipper on one side. If the weather is hot, the cruiser will lie down outside the bag, the latter simply serving to keep the air mattress clean; if the weather is cool, slip inside the bag and if it should turn cold use a blanket as well. You can easily adjust your covering to suit conditions with this combination. The air mattress will be found quite comfortable on even the hardest bottom boards or on the ground, without benefit of springs, and it will never develop lumps or get soggy with dampness. In the daytime, it may be deflated and stored away in a small space, although Liggett Gray says that he only partly deflates his mattresses, folds them once and stores them under the forward deck, thus making easier the task of blowing them up in the evening. If you don't own air mattresses and don't wish to go to the expense of buying them (if available), you could make out quite well with any of the usual variety: hair, cotton, kapok or foam rubber filled. In addition to a mattress and sleeping bag, a pillow should be carried and at least one good warm blanket, for it can get pretty chilly on the water at night, even in the warmest weather.

Mr. and Mrs. Pentz, the baby, the goat and the Airedale shove off on their way to Alaska

The clothing taken along naturally will be of the simplest variety, but be sure to include a hat to protect you from the sun, a sweater and wool socks for cool evenings and, of course, slickers and sou'westers. Your shore-going clothes, if you carry them, had best be left in the bags in which you brought them aboard. Ordinarily, I curse the man who brings aboard a suit case but, when cruising aboard a little boat, provided you can find room to stow it, there is much to recommend this piece of shore-going luggage. It, at least, provides a place where you can lay out your shore clothes in reasonable expectation that they will be presentable when needed. My favorite is a modified duffle bag about 27″ long, 16″ diameter and provided with a zipper all down one side and a pair of stout leather handles to carry it by. This bag seems to have an inexhaustible capacity, folds to a small compass when unpacked, is waterproof, light weight and sells for about $5.00. (L. L. Bean)

If you have the room for it, I recommend a two-burner stove hung in gimbals. Alcohol is the cleanest fuel and the most expensive. It also tends to blow out easily, a disadvantage in an open boat, so it must be shielded from the wind. Owing to the fact that an alcohol fire can be extinguished with water, it is probably the safest of the liquid fuels. There are a number of well-known makes of stoves that burn kerosene and gasoline and, while I should be wary of using them in a closed cabin, in an open boat they are safe enough if properly handled. One of my friends, who uses a gasoline stove, told me that he had a length of small chain made fast to it, so that he could heave it overboard if it should catch fire, and retrieve it without loss. If room limits you, a single burner will do but it will take longer to rustle up a meal. The two-burner Sterno stove, which burns jellied alcohol, makes quite a satisfactory cooker for a small boat. It is somewhat slower than the others and more expensive to operate, though clean and quite safe. In passing, let me warn you not to use "wood alcohol" in a stove, be sure to get "denatured alcohol"; there is a vast difference.

Besides the stove, your galley equipment should include a coffee pot, a frying pan, a saucepan or two, with covers, a dish pan or an enameled basin and a galvanized pail — in case you should want to cook lobsters or clams. A cover for the pail will save fuel. A two-gallon can of fuel should last quite a while, and don't forget a small funnel for filling the stove and lamps. A large spoon, a stainless steel knife, large enough to cut bread or to slice meat, two stainless steel table knives, two forks, two large spoons and two teaspoons about complete your culinary department. Need I mention the ubiquitous can opener? And don't forget a tea strainer, just in case your coffee should not be quite clear. There is a lot of other equipment, such as dish mops, brillo, dish towels, etc. which you may not want to bother with. For keeping matches dry under all conditions, I have found a heavy glass pill bottle, with a screw top and a proper gasket, a most satisfactory container. Sugar, salt and dry cereals are best carried in screw topped glass jars to keep them dry.

(Continued on page 74)

Official U. S. Coast Guard Photos

"Ever watchful" might be the Coast Guard's wartime motto. Here a Coast Guardsman surveys a convoy from the stern of a cutter

THE COAST GUARD CARRIES ON

Semper Paratus—"Always Ready"—is the Coast Guard's Motto, Which Has Been Earned in Peace as Well as in War

By WILLIAM T. PICKERING

DURING the months that have followed our entry into the war, the name of the Coast Guard has appeared in press dispatches from nearly every fighting front to which American ships and men have gone. But still, it seems that of all the combatant services the Coast Guard is the least known. Yet probably it has as many famous "firsts" in its history as any of the others.

Here are a few of the "firsts" that the Coast Guard can brag about; a record that should make every American proud:

1. The *first* commission given to a seagoing officer by President Washington was granted to Captain Hopley Yeaton, master of a revenue cutter, on March 21, 1791. The commission was signed by both Washington and Jefferson and is now in the archives of the Coast Guard.

2. Revenue cutters were *first* in action in the War of 1812, when the cutter *Jefferson* captured the British ship-of-war *Patriot.*

3. In the Mexican War, revenue cutters were the *first* vessels on the job. They were sent immediately to blockade the coast of Mexico before the Army and Navy could get started.

4. In 1858, our *first* steam Revenue cutter, the *Harriet Lane,* was used to hunt down slavers trying to run the blockade and bring negro slaves from Africa into our southern ports.

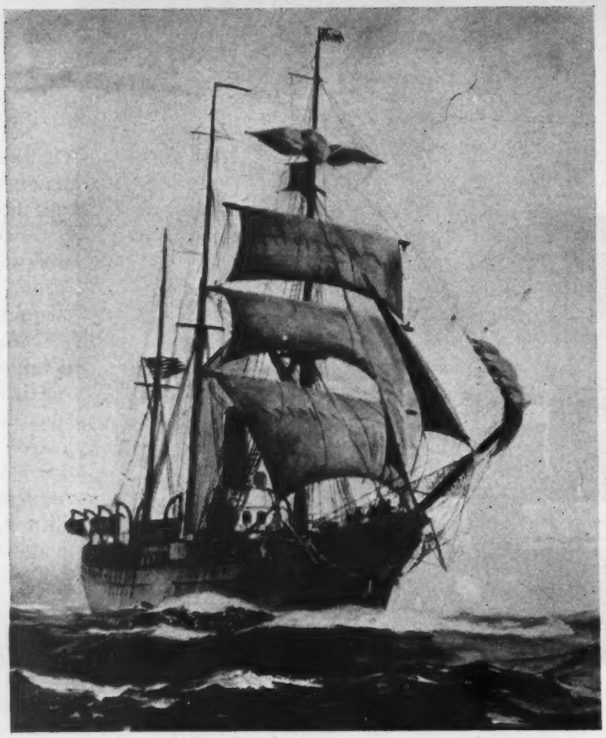
5. In the Spanish War, the revenue cutter *McCulloch* fired the *first* gun at the battle of Manila Bay, May 1st, 1898.

6. In 1903, men of the Life Saving Service (later incorporated into the Coast Guard) comprised the ground crew when Orville Wright made the world's *first* airplane flight.

7. In the last war, the Coast Guard cutter *Campbell* was the *first* American warship to be sunk.

8. The *first* American naval capture of this war in the western hemisphere was made by the *Northland,* a Coast Guard vessel, when she seized a ship off the shores of

Life jackets are the uniform of the day (and night) when at sea in a Coast Guard vessel. Note that every inch of deck space is put to some essential use



The old Coast Guard cutter "Bear" is again on duty. One of her last missions was with Admiral Byrd's South Pole expedition

Greenland and destroyed the Nazi radio station she had established.

It was in 1915 that the Revenue Cutter Service and the Life Saving Service were consolidated into one organization — the Coast Guard. This consolidation had been in effect only two years when the country entered World War I. The Coast Guard provided the imposing total of 53 cutters that took active part in that conflagration — and its percentage of losses was higher than that of any other of the armed services.

The War was hardly over for the Coast Guard when the "blessings" of Prohibition were imposed upon the country. This meant the immediate start of another war for the Coast Guard, a war that for bloody fights, dramatic chases and long weeks of arduous patrol in stormy seas and frigid nights has probably never been equalled anywhere in peace times.

In 1939, Congress passed an act creating the Coast Guard Reserve. This has done much to make the Service favorably known to the general public, and especially to the vast numbers of small boat owners. This act authorized the creation of an organization which owners of sail boats and motor boats over 16 feet in length could join and feel that they were doing something useful toward the preservation of life and property in peace times, and which might give them an opportunity to be of real help in the event of war. On February 19th, 1941, the Congress passed an amendment to the Reserve Act, establishing the Coast Guard Auxiliary. By the terms of this act, all small boat owners who prior to that date had belonged to the Coast Guard Reserve automatically became members of the Coast Guard Auxiliary, leaving the Reserve what it truly should be, a military adjunct of the Coast Guard.

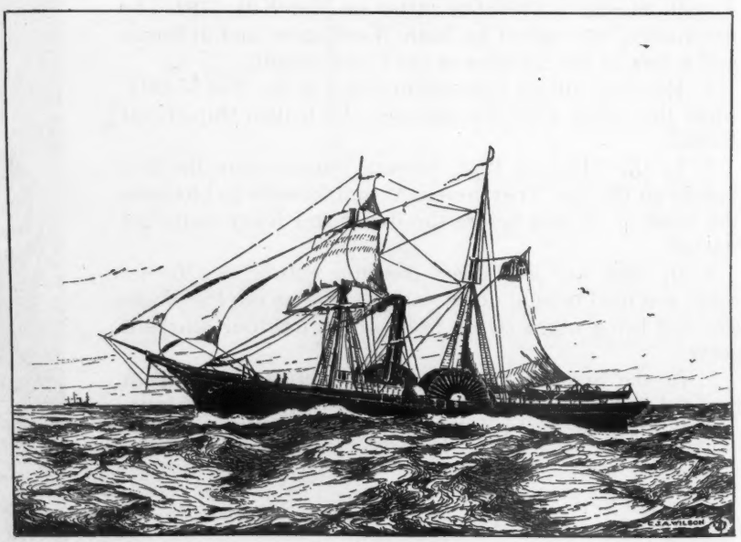
Immediately following the attack on Pearl Harbor, the Coast Guard sent out an urgent call for help to the Auxiliary, and its members responded promptly and enthusiastically. There were then only a few flotillas of the Auxiliary in and around our important harbors. During the first weeks of war, before the Coast Guard itself had acquired the necessary boats and manpower to patrol our vast seaboard, the Auxiliary did a large part of the patrol work. Today, although the Coast Guard has expanded enormously, the Auxiliary, with hundreds of boats and thousands of members, is doing more effective work than ever before and is rendering material assistance to both the Coast Guard and the Navy.

It was only logical that men who served in the Auxiliary should want to enter the Coast Guard for active duty. As a result, many of the best men that the Service has taken in — both officers and enlisted men — have come from the ranks of experienced yachtsmen.

While the maintenance of aids to navigation, and its life saving activities, are still important integral parts of the work of the Coast Guard, it is no military secret to say that today its three most vital activities are: (1) patrolling harbors and coastal waters, (2) providing ships for convoy duty and men for transports, (3) furnishing sentries and patrols for docks, shipyards, beaches, etc.

To men with yachting or small boat experience, the most appealing of these is patrol duty. Especially to married men or to older men with business or professional interests who would like to stay somewhere near their home ports, this branch of the service is extremely attractive. Of course, once you are in, there is no guarantee that you will not be put in a shore station or sent to Iceland, the Solomon Islands or North Africa, but to date the tendency has been to keep the majority of such men in their home naval districts. This naturally does not apply to young enlisted men; nor to men who go into the transport service, who have been recruited mostly from the ranks of the merchant marine.

(Continued on page 68)



Above, the new type Coast Guard ensign. Note that there are thirteen stars and sixteen vertical stripes. Right, the "Harriet Lane" was the nation's first steam Revenue Cutter. Official U. S. Coast Guard Photos

MAY, 1943

THE POST-WAR SMALL BOAT

Part III — Moulded Plywood and the Small Yacht of the Future

By ROBERT J. WOODS and JOHN S. BARNES

The advantages of moulded plywood are most evident in small boats. This 12' dinghy, designed by Harry Hall and built by The Anchorage, gains much in performance from her moulded hull

MOULDED plywood in itself will eventually bring about evolution in design. Yet the new freedom it offers would benefit by a period of unhampered experiments. It would more rapidly and fully develop the possibilities of the process and dissolve the unconscious barriers to free thought set up by years of Noah's Ark construction and building to rules. Unfortunately, the cost of moulds in the new process adapts it better to quantity production than to development work. This seems to be a vicious circle. No doubt, tank testing could be employed to accelerate development.

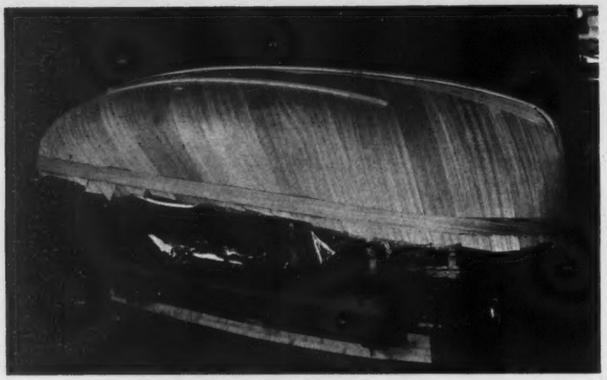
However the new models come, it is inevitable that, when they have reached a certain point, rules and one-design class restrictions will be as necessary for moulded boats as for any other types. Perhaps you have noted that all widely popular one-design classes are chine boats and that many builders, both amateur and professional, build the boats that make up one of these classes. Likewise, all of the boats in any one of the round bottom one-design classes are the product of one builder and none of these classes has achieved the wide popularity of the chine boats. The reason is that it is a practical impossibility to measure a round bottomed hull with sufficient accuracy to certify it as of one-design. Consequently, there is no knowing how nearly exact duplicates the boats of a class are. Such a class becomes a monopoly of one builder, which is not conducive to general promotion or adoption. Moulded plywood offers a solution to this problem in that the mould controls every dimension of a hull and duplicate moulds may be made from master moulds, so that it is necessary only that a hull be made over a certified mould to guarantee its exact adherence to a design. Much tedious and inaccurate measuring is eliminated. Amateurs should be able to secure such skins to finish up.

Not so many years ago, the Curry racer created quite a sensation at the New York Boat Show. She was a strange craft, designed by Dr. Manfred Curry and built in Germany. She embodied many of the advanced ideas of the doctor whose writing on aerodynamics and tactics — although quite controversial — set forth for the first time many things that only the most experienced racing men sensed and few had ever expressed. The hull was cigar shaped and, in addition to fancy brakes, centerboard and outriggers, carried a mainsail with full length battens and a big overlapping jib. Anyone familiar with boatbuilding was intrigued by the beautiful double planked construction. Obviously, she was a costly boat to build, largely because of the extremely light weight and the streamlined shape. Perhaps that was one reason why the class never "took" in this country though the boat proved extremely fast on some points of sailing. At any rate, the doctor, who had given great thought to the subject, wanted a hull that was so difficult to make that its cost would most certainly prevent its ever becoming popular regardless of its performance.

Somewhat the same story applies to the better known British 14-foot International Dinghy introduced into this country about eight years ago. A fast and lovely performing boat, she too had an expensive, light weight, double planked hull of a rather difficult form to build. While cost may not have been the only reason why the British Dinghy never became one of our popular small boat classes, it certainly was a most important factor, as evidenced by the many means tried by its sponsors to reduce the cost. Unfortunately, each change in specifications or construction towards that end materially injured the performance of this highly developed craft. Both the Curry Racer and the British Dinghy could be built by the moulded plywood process at less cost, as is now being done with the latter.

We know that weight distribution is extremely important to the performance of any sail boat. No matter how much the final completed product may weigh or how much ballast is added to the hull, the more control the designer can exercise over weight, the more controlled are his results. By being able to reduce the weight of his hull greatly through the use of moulded plywood, he can either decrease total weight or increase the percentage of ballast. Perhaps the immediate thought is to reduce the total weight. But this reduces displacement, and displacement is closely related to stability which is also related to hull form; the ideal result will be a better balanced combination of hull form, weight distribution and total weight.

In a small sail boat, such as a Frostbite Dinghy, the



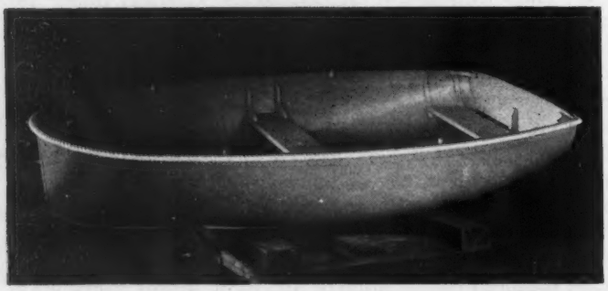
Veneer and lumber parts assembled and held together loosely on the mould, ready for bonding under heat and pressure in the autoclave

weight of the crew is a great percentage of the total weight of the loaded boat under sail. Every pound that can be saved in a boat of this size is important, and moulded plywood has already demonstrated its advantages in sail boats of this type. Obviously, the possible savings cannot be as great a percentage of the total weight as in a larger boat where the irreducible weight of the crew is a smaller part of the total. For this reason, we feel that the greatest advantages are to be realized in the small, ballasted boats.

Let us imagine a 25-foot day sailer. Because she can be built so lightly, a large, easily driven hull is indicated. She would have little displacement without ballast, but because a small amount will have a great effect, we do not have to

The shell of the hull as it appears after bonding and removal from the mould. Notice the re-enforcing strips moulded on inside of hull

add more than just enough to give the boat the minimum satisfactory displacement and final stability. Stability at the smaller angles of heel would be form stability, resulting from hull shape, as in a centerboarder. We now have a rather large hull of excellent freeboard, generous beam and full bilges. The boat is of light displacement and easily driven, which naturally means small sail area and little weight aloft. This again contributes to stability as well as to ease in handling. Our day sailer, then, should have lots of room, be exceptionally dry and quite comfortable. Her stability will be ideal



A dinghy with the hull complete. This is one of the 8' Hydrolite dinghies built by Skaneateles Boats, and carried by Navy M.T.B.'s

at all angles and this will, of course, contribute to speed and sea-kindliness going to windward. The small rig will make her a cinch to handle but, in spite of it, she will be unusually smart and lively in performance, anything but the logy lead mine that has been developed under the open class rules.

It's a rather pleasant picture, don't you think? And all quite within the realm of immediate possibilities just as soon as the crew comes sailing home again. Not only possible but just the beginning for, in this little dream, we have stuck strictly to the normal type of hull and suggested only the kind if not the actual changes and improvements that will be brought about by more complete control of weight distribution. We have not conjured up any of the miraculous new hull forms that are bound to appear as time goes on. Still, without going off the deep end, is it not entirely possible to expect to carry some adaptation of our conical bow into the forward end and possibly into the stern of our 25-footer? Up to some predetermined point between the water line and the deck, the shape of the sections will be governed entirely by sailing performance but, from that point up, would it not be possible in the forward and aft sections to continue the angle of the sections on out, or even flare them out to form an elliptical deck line when viewed in plan? This could be done, we feel, without increasing the boat's tendency to pound in a head sea, and our hull is going to sail at a smaller angle of heel which will lessen the opportunity for bow sections to cause pounding. It is wholly possible that this bow could be worked out not only to decrease pounding but to deflect spray downward and make a much drier boat. The increased freeboard mentioned earlier, permitted by decreased hull weight, not only adds to dryness in itself but, by increasing the depth of the sections, allows more opportunity to vary the shape of the section in its upper portion and to widen out the deck line.

An elliptical bow and stern would contribute materially to comfort, freedom of movement on deck and to ease of handling. Having always thought of a boat as being pointed at least at the bow, it has hardly occurred to us how wonderful it would be if she were not. Think of going forward on a 25-footer and walking at ease around the forestay, facing aft and taking off the jib; handling the anchor with your legs far apart and as steady as can be; picking up a mooring without perching on the bow like an awkward, insecure figurehead; heaving a line to a dock and then not being in peril of going overboard as soon as the fellow on the other end starts to heave — in short, to have your legs under you and room to use them when you go 'way forward. Aft, it would be like adding to the size of your living room. No longer would it be necessary that the deck line begin to draw in right where you want to sit in the cockpit. Then, too, it is nice to be able to work freely around the end of the boom when taking in sail or reefing. Don't laugh, you blokes who cruise around at ease in a modern 50-footer with an all inboard rig, it ain't so easy in a 25-footer whether the rig is inboard or not.

If we want a little overnight cruiser, the 25 feet of overall length will do a lot more for us with a moulded plywood hull than ever before. Because of our control over weight, we can now handle the added cruising gear much better. The anchor, the stove, the ice, the water and even a little auxiliary, may be carried without increasing the cruising weight much, if any, above the bare weight of the same hull if built of lumber in the present fashion. The elliptical deck plan would so increase usable deck space in the ends that cabin house and cockpit could be carried considerably further forward and aft, increasing the room below decks. I don't promise you that the first glimpse you get of this new creation will send you into raptures over her beauty, or that some of you dyed-in-the-wool traditionalists like Bill Taylor would even be

(Continued on page 88)

UNDER THE LEE OF THE LONGBOAT

By "SPUN YARN"

ALTHOUGH I've said nothing about the weather in recent months, my silence has not been an implication that it was lovely in Dismal Spit this winter. On the contrary. I've been speechless. When the sun came north of the Line, as it did reluctantly, we had no equinoctial gale that you could distinguish from any other gale, nor did we have any perceptible expansion of mercury in the tube. Following April Fool's Day, when the Navy in its infinite wisdom called in the special winter clothing, thereby establishing warm weather, we had this meteorological merry-go-round: Cold, fresh southeast breeze, right off the frozen reaches of the Gulf Stream; next day, icy fog from the same quarter; next day and the day after, cold northwest gale. The northwester blew itself out, and the morning after dawned clear and cold with a breath from the east. In any orthodox community, the easterly would have followed the sun around and given us a spell of warm weather. But not here. After daybreak, it shifted to the north and northwest, and by sundown had backed all the way around to the southeast, bringing fog. In the night, another cold front came through with hail and rain and in the morning the wind was once more in the northwest. Last night the sea was still — for the first time, I believe, since Washington's Birthday — but today we again have our northwesterly. It is not blowing hard, I admit, but it is not bringing the harbingers of spring on its non-perfumed breath. . . . If "spring" comes, can summer be far behind?

I had the pleasure, recently, of going from Port A (as the writer fellers say) to Port B in a British MTB. That was the day I couldn't find my oilers, and the wind was ahead and cold, with small craft warnings hoisted. In mine sweeping, I've managed to stay dry and fairly warm and, in a fatalistic sort of way, I've wondered how awful it would be to be precipitated into the icy deep by the detonation of a mine. I may now say that, if complete immersion is no worse than being deluged by sheets of spray, coming so fast one after the other that you get tired of ducking, it is not unbearable. What really got me in the MTB was the violence of the pounding. I was told the boat — a Vosper job — would stand it, but I wasn't sure I could. The first jolt caught me straight-legged and nearly broke my neck. That taught me better than my mother had ever done to bend the knee. Another jolt, when my knees were bent, slapped me down so hard I almost cracked my chin against them. From that I learned to keep sufficient tension in my knee action. Little by little I got the hang of existence and, by the time we reached Port B, eight hours after our departure, I was cold, wet, miserable — and happier in a peculiar sort of way than I'd been since the hardcase Fastnet Race of '27. They're grand little boats, the MTB's, but, as in so many other activities of this global war, you've got to be a masochist to appreciate them.

I've heard of a shipwrecked sailor who found that the Nautical Almanac which he picked up in the flurry of abandoning ship was a year old. A mistake of this sort is not serious, as a 1943 sight worked from a 1942 Almanac will not be in error more than ten miles. Ten miles is bad if the island you're headed for isn't ten miles wide, but it's better to have a general idea of your position than none at all.

I'm surprised that some novelty manufacturer hasn't come out with a solar declination table (and no other information) indelibly printed on celluloid, that you can keep in the sextant box as part of your abandon ship equipment. If I were bound overseas in a YMS, AM, PC, or any other type of ship, I wouldn't wait for somebody to print up such a table for me. I'd damn well do it myself. Here's the point. In the confusion of taking to the small boat, the chronometer may be ruined; the *Nautical Almanac* may be rendered illegible by water and hard use; and even pencils and paper may be left behind. But, if you have your sextant (which should be a navigator's first thought) and, contained in the same box with it, the declination table of the sun, you can take your sights at noon, work them in your head, and never when the sun shines be at a loss for latitude. Then if you remember (as you should) the latitudes of the principal islands of the ocean in which you're shipwrecked; and if there's any wind you can slide down it to a happy landfall. . . . Maybe it isn't as simple as I paint it. But if I were you I'd get that declination table into the sextant box before a torpedo got me.

People have been asking what changes I intend to make in my boat when the war ends and I can again go sailing. The answer is nothing much so far as sailing is concerned. But I'll feel like a fish out of water if I don't paint her gray, load a couple of depth charges on her stern, degauss her, and, "being in all respects ready for sea," signal somebody for permission every time I get under way on duty assigned.

(Continued on page 70)

SPRINGTIME TUNE-UP

Part II—High Tension Wiring, Ignition, Carburetion and Other Matters

By H. AUSTIN MURRAY

High Tension Wires

Inspection of high tension wires is important and will usually reveal any defective ones. Everyone knows that a chain is only as strong as its weakest link but perhaps we don't realize how these wires can be the weakest part of our ignition system. Two things should be looked for: first, poor connections with metal clips at ends of each wire and, second, defective insulation.

If the clips are making poor contact, or are corroded, you can lose over half the strength of the spark between the coil and plug, causing missing at full throttle. For best results, the ends of each wire should be soldered to clips. By having good contact, you also benefit in another way, you prevent arcing and formation of ozone which destroys any insulation in a short time.

Note whether there is any chafing where wires enter metal conduits. Bend the wires at these points to see if the covering or insulation cracks open. Should you replace these wires, use the best quality (assuming you can still obtain it) and replace one wire at a time.

Spark Plugs

New spark plugs at the beginning of the season are a good investment if your old ones saw much service last year, otherwise clean them in a sand blast cleaner and inspect. Replace them if the porcelains show any cracks or if the electrodes are badly eroded. If plugs are serviceable, regap to .025" by bending side electrode only. Marine engines work "uphill" all the time and require "colder" plugs than do similar engines in automobiles. Using too "hot" a plug in a marine engine may lead to preignition and severe damage to pistons and rings. In any case, it will burn away faster than will the correct type of plug. If you want the best results, be sure to follow the engine manufacturer's recommendations when replacing plugs.

Ignition Timing

The last step in your check-up of the ignition system should be ignition timing. Correct timing is important if you are to obtain maximum engine efficiency. If spark timing is late, your engine cannot develop its best power and fuel consumption, and overheating is apt to follow. If spark timing is too early, your engine may knock and lose power.

There are three simple methods of checking ignition timing: 1. Static setting with indicator lamp; 2. Timing lamp (neon), engine idling; 3. Adjustment under full load for maximum r.p.m.

For the first method, you should consult your engine manual for the correct setting. Spark timing in any case is always referred to as "so many degrees" (crankshaft rotation) before top center (BTC) or after top center (ATC). The top center position (or top dead center) means only one thing: when the No. 1 piston is at the end of the *compression* stroke — the extreme upper end of its travel. The flywheel is the ideal reference gauge on which to note the position of the No. 1 piston. The ignition timing mark is usually stamped on the rim of the flywheel and can be readily seen if the flywheel cover is removed. Before connecting the indicator lamp disconnect the primary wire or leave the ignition switch turned off, otherwise the lamp will burn out. Connect your indicator lamp across the pair of breaker points and slowly turn over the engine with No. 1 piston coming up on the compression stroke (valves will be closed; if you hold your finger over the spark plug hole, you can feel the compression). The lamp will be "on" while the points are closed and will go "off" the instant they open. Stop rotating the shaft the instant the points open because this is where the spark occurs. If the mark falls at location B, Fig. 1, it is too late; if it happens to be at C, it is too early. Loosen the clamp screw or nut at the base of the distributor and rotate the distributor until the lamp goes off, or the points just open when the timing mark is opposite the pointer as in position A. Remember that moving the distributor body in the direction opposite to that of shaft rotation, advances ignition timing and vice versa. It is a good idea to turn over the engine a few more revolutions and recheck this spark setting to be sure that an error from gear backlash hasn't crept in.

The second method, using the neon timing lamp, is about the same as the first one, except that it is done with the engine running at idling speeds. The neon timing lamp has two high tension wires extending from the back; these are hooked in series with the No. 1 spark plug wire and the timing lamp is held before the flywheel. Every time there is a spark impulse to the No. 1 plug, the neon filled tubes flash, giving you an instantaneous image of the flywheel just as if it were stopped. A chalk mark is necessary over the timing mark to give a clear image.

The advantage of the neon timing lamp is its usefulness in synchronizing magneto and battery systems at wide open throttle. Some of these dual ignition systems have a magneto with manual advance and a battery system with automatic advance — and probably neither one has the same advance rate. Consequently, it is almost necessary to synchronize them at full throttle rather than at idling speed.

It is often a good idea to recheck your spark timing with the engine under load. This can be readily done with your boat tied up at a dock so that you can run the engine at full throttle in forward speed. A tachometer is quite important in this test to note changes in engine speed with various spark settings. You can advance the timing until your motor starts to ping, knock, or until it shows a drop in r.p.m. Then retard until you lose r.p.m. Now you know that in between is where your engine develops its greatest power or peak efficiency. Don't set the timing up to the point where the engine knocks

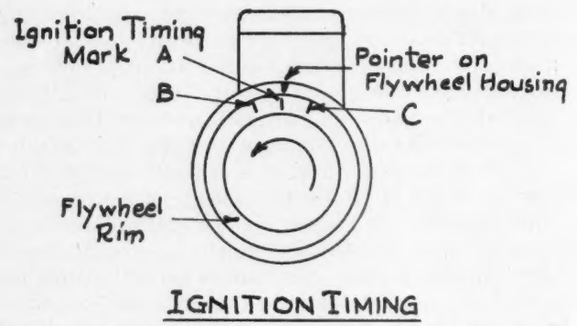


Fig. 1. Marks on the flywheel are necessary in timing the ignition

or detonates, as this is bad for the engine, but retard slightly. If you should change your fuel at a later date to one having a lower octane rating, it will probably be necessary to retime your engine. Once you have found this ideal setting, you should mark it on the flywheel for future reference.

Let us see where some of the losses can creep into our ignition system. This is illustrated in Fig. 2. Your job is to reduce these leakages to a minimum if you want to get the most energy to the spark plugs. Anyone of these leaks, if large enough, can be responsible for poor engine performance or complete failure.

Compression and Vacuum Tests

A compression test is the best method to tell you about the condition of your valves, head gasket and rings. Don't let yourself be sold on a valve and carbon job unless your mechanic proves it necessary by this test. A compression test need not be made unless your engine has had from 300 to 500 hours use since last overhaul. As an indication of the value of this test, air lines make it a regular part of their inspection routine. Almost without exception, leaking valves can be discovered before they burn or fail completely by this method.

Running a compression test is simple. First, remove all spark plugs, then connect the compression gauge into the first plug opening. The standard compression gauge has a recording needle showing the peak pressure as the engine is turned over. Next, spin the engine with the starter for about five to ten compression strokes for each cylinder. Modern engines have compression pressures anywhere from 90 to 130 lbs. per square inch. A variation of plus or minus 5 lbs. from the average of all cylinders is permissible. Any cylinder showing more than 5 lbs. drop should be checked for leaking valves or damaged head gasket.

A vacuum test is a good supplement to the compression test although not very important by itself. The vacuum gauge is normally connected to the intake manifold with the engine run at idling speed. An engine in good condition shows a steady reading on the vacuum gauge of 17 to 18 inches (mercury). Bad valves, particularly intake, cause marked pulsations on the gauge. Leaking manifolds or badly worn valve stems and guides reflect a steady but subnormal reading.

A vacuum gauge can be used to good advantage in fuel pump testing when hooked to the suction side of the pump and running the engine on the fuel left in the carburetor.

Should you find sticking valves, look for the cause and prevent its recurrence. They are frequently caused by water backing up the exhaust line into the motor. Sometimes kerosene will help free sticking valves but be sure that your water discharge is properly installed. If sticking valves are nearest to the exhaust line, water is the most likely cause. The water discharge should enter the exhaust line 4 or 5 inches, measured vertically, below the manifold outlet of the highest point in the exhaust line. From there, it should slope downward to be sure that no water remains in the line which might return to the engine.

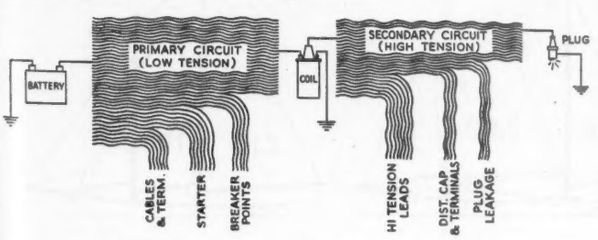
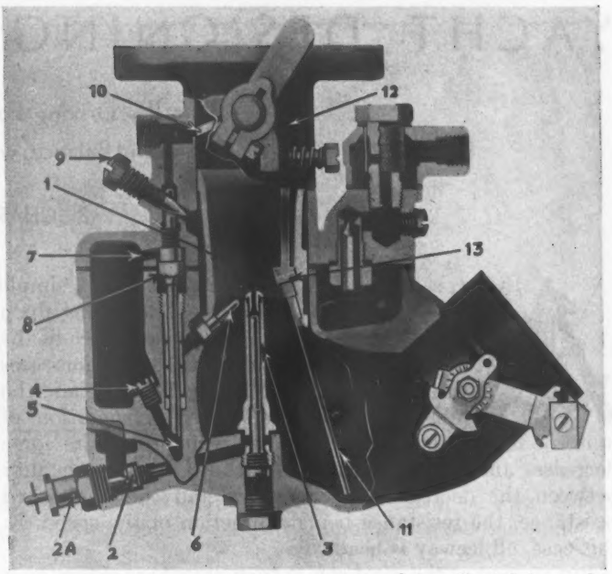


Fig. 2. Possible losses in the ignition system



Courtesy Zenith Carburetor Co.

Fig. 3. Sectional view of a Zenith marine carburetor

Carburetor

Everyone wants to get the best fuel economy from his engine and there is usually room for improvement in this respect. I have found that fuel economy could be improved 20 to 30 per cent in most boats — even brand new ones. These savings in fuel can be made by simple adjustments. Before we get down to some tips on carburetor adjustment let's check up on how it works.

The float mechanism serves only to keep a uniform level of fuel in the carburetor without which the fuel flow through the various jets would be extremely erratic. The idling system (5, 8, 9, 10, Fig. 3) controls the fuel at closed throttle and is, in itself, a small carburetor. As the throttle is opened, the operation of the idling system rapidly drops out and main discharge system (2A, Fig. 3) takes over. The mixtures delivered by a properly adjusted carburetor vary with each throttle setting. At idling speeds, there is so much residual exhaust gas left in the cylinder from the preceding cycle that we have to supply a rich mixture to obtain smooth engine operation. (Air-fuel ratio 10:1). Over the range of ¼ to ¾ throttle opening is where the mixture should be lean (air-fuel ratio 14:1 or 15:1). Then, at wide open throttle the ideal carburetor richens up a little to give the best power (air-fuel ratio 12:1). In other words, lean mixtures are desirable for best economy and moderately rich mixtures are necessary for maximum power.

Most carburetors have auxiliary systems, such as accelerating pump, compensating jets, power jets, etc. These should be left alone except to make certain that they are not clogged with sediment or foreign material.

So much for the theory — now for a few tips on the practical side of carburetor adjustment. Here is briefly the order of checking I would suggest: 1. fuel or float level; 2. idle adjustment; 3. main jet adjustment (intermediate and high speed). I have placed float level adjustment first because if this is badly off, it is hopeless to attempt an adjustment of idle and main jets. Fuel level which is too high is dangerous, because gasoline may overflow from main discharge tube (3, Fig. 3) when engine is stopped, if tanks are above the carburetor level, unless petcock in the fuel line is closed when ignition is turned off.

Since most marine engines are equipped with Zenith

(Continued on page 72)

YACHT DESIGNING FOR THE AMATEUR

Part II — Driving Force and Leeway, Lateral Plane and Balance, with Something About Sails

By CHARLES H. HALL

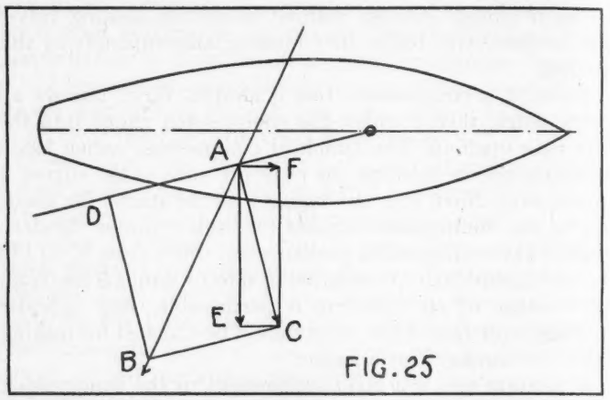
A BOAT sailing before the wind presents a simple problem. The force of the wind acting upon the sails must overcome the resistance of the hull to ahead motion. This resistance increases with the speed until the driving force and the resistance are equal, when a condition of uniform motion is attained. If the wind drops, its force decreases and the boat slows down until there is equality between the decreased driving force and the diminished resistance, the resistance being a function of the speed. In this case, all leeway is headway.

But as soon as the wind comes from anywhere except over the taffrail, the problem changes. The force of the wind is then divided into two components, one tending to drive the boat ahead on her course, the other tending to force her sidewise — producing leeway, in other words. As the boat's course approaches the wind, the leeway-producing component increases and that producing motion ahead diminishes. When a boat is being pinched, the driving force almost vanishes and the boat stops and merely bobs up and down, rapidly getting nowhere.

The old parallelogram of forces will make this clear. In Fig. 25, a boat is on the wind. The force of the wind may be represented, both in direction and intensity, by the line AB. Resolve this into two components, one at right angles to the sail and one parallel to it, AC and AD. AD merely produces friction on the sail and is otherwise lost. AC remains. Now resolve AC into two components, AF, parallel with the center line of the hull, and the other, AE, at right angles to it. AF is the force driving the boat ahead and it must overcome the head-on resistance of the hull through the water, the wind resistance of hull, spars, etc. AE represents the force producing leeway and this must be resisted by the under water part of the hull, the lateral plane, as it is called. This lateral plane is furnished by the hull itself and the centerboard, if one is carried. A boat should have enough lateral plane so that she will not be blown off sidewise but not too much, since any surface not needed to resist leeway adds resistance through its skin friction. As usual in naval architecture, there must be a compromise and a certain amount of leeway is accepted so that the head resistance will not be too great.

The shape and disposition of the lateral plane has a tremendous effect on the boat's balance under sail, a subject about which we have some empirical rules and not too much real knowledge. The experimental model basins, particularly that at Stevens Institute, Hoboken, N. J., are doing much to enlighten designers on this subject but there are still too many who try to get balance by rule of thumb.

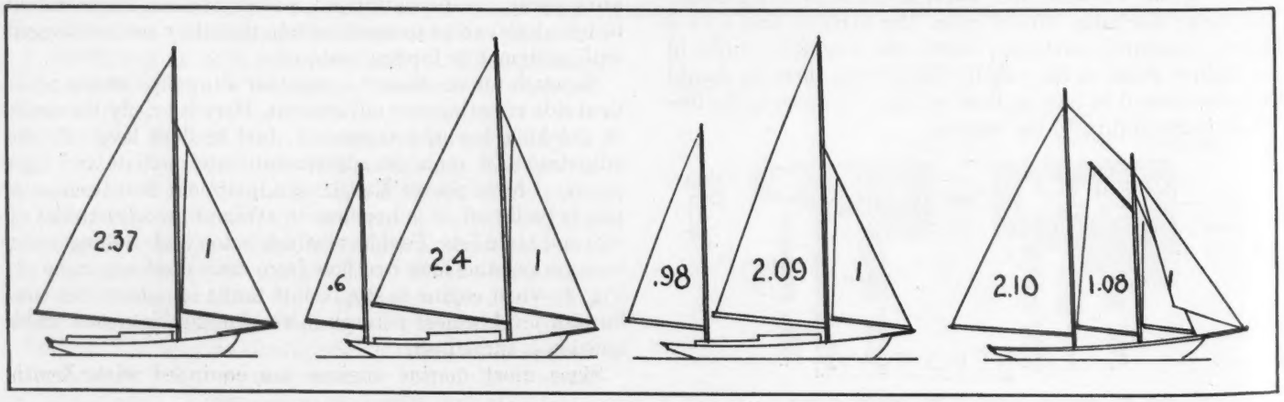
Not all parts of the hull are of equal value in resisting leeway; flat surfaces, such as the after deadwood, should be more efficient than the rounded form of the hull amidships



Analyzing the effect of the wind on a sail

but it is a question how efficient the after few feet of the deadwood really are as compared with even a small centerboard fairly well forward. The sides of a V-bottom boat should be more efficient in resisting leeway than the round sides of the conventional model and some of the small boats of that type, like the Comets and the old New Haven sharpies, certainly do go to windward well in smooth water. Their resistance to leeway is high and, with their shallow hulls, their head resistance is low.

In considering leeway, we must remember that the boat is heeled in a breeze and that surfaces which are vertical in the upright position are then at an angle and, consequently, less effective. The model tanks will doubtless provide us with reliable data on this subject in the future, when they can get



A comparison of rigs, with the ratios of headsail areas to the other sails

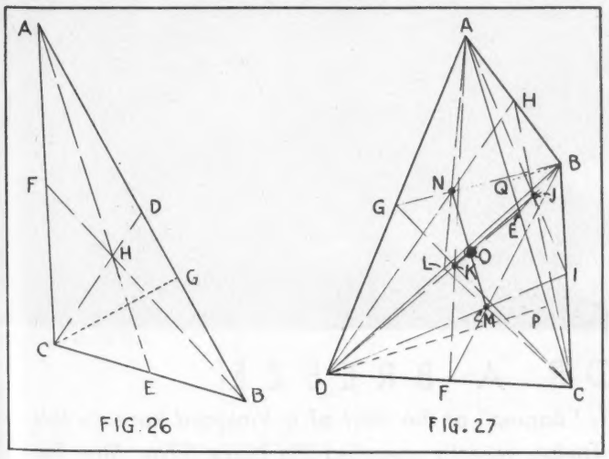
back to yachts once more. For the present, we'll have to fall back on empirical rules and on the teachings of experience. So many things, some apparently trifling, affect balance that no naval architect is quite comfortable about a new boat, especially if she has any radical features, until he has tried her out under sail, both in light airs and in a good breeze of wind.

The amount and distribution of the lateral plane has a great effect on a boat's performance, especially to windward. If there is too little, the boat will sag off to leeward and not "go where she looks." If there is too much, the wetted surface will be too great and the resistance due to skin friction will be too high. If the profile is cut away too much at the ends, the boat will be a "silly steerer" and be running off her helm all the time. If there is too much surface at the ends, she will be slow on her helm though she will hold her course well and heave to well. In general, a long, straight keel bottom will make for ease in hauling out since it is possible for the yard to get one or two keel blocks misplaced if the profile of the keel has considerable curvature. A high block is apt to strain the hull. The keel bottom should have some drag, so that the after end of the keel is its lowest point.

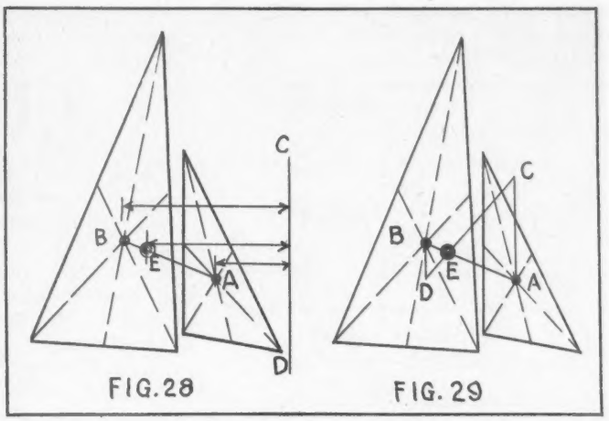
The Center of Lateral Resistance (CLR), the point at which all of the resistance to leeway may be considered to be concentrated, should be from 54 to 58 per cent of the water line length from the forward end of the water line, Station 0, and the area of the lateral plane should be from 4.25 to 5.5 times the submerged area of the midship section, for a keel boat. A centerboarder may have less lateral plane than this since the centerboard, being a flat surface, is more effective in resisting leeway than the curved hull of a keel boat. Indeed, in balancing a shallow centerboard boat, the flat surface of the keel outside of the rabbet, the deadwood and the centerboard are all which need really be considered in finding the CLR.

The area of the lateral plane may be found by measuring the distance from the water line to the keel bottom on the various stations and applying Simpson's rule; its center is found by taking moments about the midship section or the forward end of the waterline. (This method of calculation will be given later.) A quick, and remarkably accurate, method is to trace the under water profile on paper, cut it out, fold it longitudinally (to give it stiffness) and balance it over the edge of a scale. One advantage of this method is that, if you know where you want the CLR to come, you can trim off the tracing by degrees until it balances at the proper point. Some designers include the rudder in the lateral plane but my personal preference is to omit it.

Perhaps the best way to determine the amount of sail which a boat should carry is by comparison with a successful boat of the same size and type, though there are a number of rules



Finding the CE of a single sail



Two methods of finding the CE of two sails

of thumb which purport to give approximate results. One old rule was that the sail area should be about the square of the water line length, 900 square feet for a 30-footer, for instance. Another rule calls for the sail area to be related to the wetted surface, being about three times that figure though the ratio varies from 2 to 4. Still another relates the sail area to the area of the midship section, the proportion being between 45 and 55 for cruisers. And a fourth depends on the displacement, saying that the square root of the sail area should be from 5 to 6 times the cube root of the displacement in cubic feet. Incidentally, the clippers used to move a ton of ship with about eight square feet of canvas. None of these rules take into account the type of the boat or the amount of her righting moment. Really, we should determine the sail area at a later stage of the design, when we have some idea as to the boat's stability. The rules quoted merely give a working approximation useful in beginning a design.

The amount of sail area will depend largely on conditions in the waters in which the boat is to sail, more canvas being allowable where light weather prevails. British boats usually carry less sail than American ones of the same size though in recent years boats on this side of the Atlantic are not as heavily sparred as they were forty years ago. Boats on our Pacific Coast usually carry less sail than those along the Atlantic shore, of the same size and type. The famous New York Yacht Club 30-footers, dating from 1905, carried some 1100 square feet of canvas while the "32's," for the same club, built in 1937, spread but 950. The older America's Cup boats had about double the area of the latest ones; *Reliance*, 1903, carried 16,160 square feet as against *Ranger's* 7546.

So much depends on the type of hull. A wide, bulky boat will need a large amount of canvas to drive her while a narrow, light displacement hull, like that of the "Thirty Squares," will move along under a comparatively small sail plan and be a lot easier to handle. The rig also depends a good deal on the size of the boat, the work she is to do and the personal preference of the owner. For offshore cruising, especially short-handed, a divided rig is indicated as with it, the mainsail may be lowered or eased off in a sudden squall and the boat kept under control, being jilled along until the wind lets up. The divided rig also means that the largest sail is not too big for easy handling. The limiting size of the largest sail may be 500 square feet or so; more for a husky, young, experienced sailor, less for an older man or a beginner.

There is much to be said for the cat rig for a boat of 20 feet length or thereabouts. There is only one sail to worry about and the cat is particularly handy for afternoon knocking about single-handed. But she is a nuisance for a long passage or a cruise for, with so much windage forward, she will not lie quietly at anchor. Off the wind in a breeze, a cat

(Continued on page 86)

J. H. W. Kerston Photo

WHISTLING FOR A BREEZE

Henry C. Taylor's "Baruna" at the start of a Vineyard Race. In this yacht Lt. H. S. Taylor, recently awarded the Navy Silver Star for services in a PT boat in the Solomons, got much offshore experience

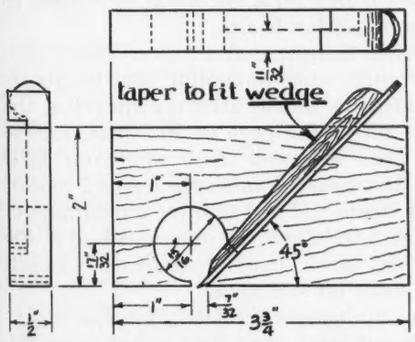
"GADGETS & GILHICKIES"

A Modelmaker's Rabbet Plane

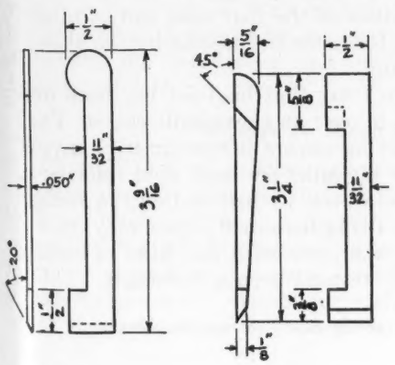
▶ You may remember that last month I promised to tell you more about some of the tools that I have made for myself. This month I am going to describe a small rabbeting plane that is an almost indispensable tool for doing certain operations; particularly if you are a model builder. It is one of those specialized tools that you don't use very often but when you need it, you need it badly. Incidentally, while the details shown are those of a rabbeting plane, there is no reason that the same principles of construction may not be applied to building planes for other purposes. A round bottomed plane, for instance, which would be extremely handy for making hollow spars.

The dimensions shown are, naturally, subject to any variation that suits your needs. If the size is increased, however, be sure that you use a thicker blade as one that is too thin tends to chatter when cutting, and produces an unsatisfactory surface. For small sizes, old hack saw blades make fine plane irons and these blades are quite satisfactory even for the larger sizes if you can get them. If you have some way of getting hold of some discarded blades from a machine hack saw — the large size ones — by all means do so as many useful tools can be made from them; scrapers, for instance.

Probably the best wood for the body and wedge of the plane is well seasoned maple, although birch or almost any other hard wood would do. Do not waste your time making tools of soft wood. After roughing out the blank for the plane, allowing a little excess material all around for final finishing, clamp the blank in a vise on its 2" dimension. To the bottom of the blank, clamp a piece of waste wood slightly less than 2" wide, about ¾" thick and perhaps 4" or 5" long, using a "C" or a parallel clamp. Now bore the 15/16" diameter hole in the position indicated, using a bit of that size. There is no magic in this dimension, it just happens to be the one that I used; if you don't happen to have a 15/16" bit, use a ⅞" or a 1" one. The important dimension is the thin "land" at the forward end of the opening for the blade at the bottom; this wood should be 1/16" thick so that, if you use a different size bit, you will have to vary the 17/32" dimension (shown) to suit. The object in clamping the blank in a vise was to make sure that the maple would not split when the spur of the bit entered it. The piece of waste wood clamped to the bottom was to prevent splintering of the edges when the bit came through.



PLANE BODY ~ MAPLE



BLADE
20 Gauge tool steel, hardened

WEDGE
Maple

A Small Rabbeting Plane

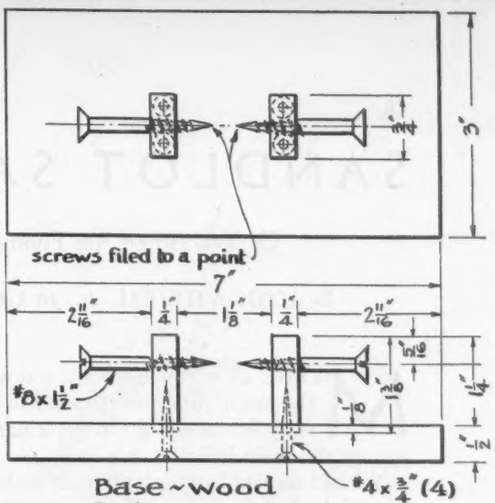
The next operation is cutting the slot for the blade and the wedge. This should be laid out carefully so that the front face of the blade lies tangent to the clearance hole and at a 45° angle with the bottom, as shown in the drawing. The preliminary cutting may best be done with a fine toothed back saw, the bottom of the groove being chiseled out. The final fitting should be done with a file. A coarse pillar file about ½" wide, with a safe edge will be about right.

The fitting of the wedge into its slot is extremely important as it must be a perfect fit from end to end, as must also the blade; otherwise it would be impossible to keep the latter in satisfactory adjustment. Don't be discouraged if the first wedge is not a perfect fit as it is quite a ticklish job to get it just right. The final shaping of this part had also best be done with a file. Be careful that the lower edge, where the sharp bevel comes, presses tight against the blade, otherwise shavings will force themselves up under it, causing delay while you stop to remove 'em.

After all the parts are properly fitted, the outer surfaces may be sanded smooth and given a couple of coats of white shellac. A final rubbing with fine steel wool will give a nice finish.

If you make the blade from a hack saw blade, take care in the grinding process that you do not overheat it, and thus draw the temper. Keep a can of water handy so that it may be dunked from time to time. If you make the blade from tool steel, get a piece of 20 gauge (.050"), ½" wide and about 4" long. File it to the shape shown in the drawing, heat the cutting end to a bright red and quench quickly in a bath of cold water. This will give you a cutting tool that will hold an edge better than any commercial plane you ever saw. Finish up the cutting edge on a medium India oil stone and follow with an Arkansas oil stone, for a fine edge. I have found that, if the last few passes on the stone are made from side-to-side of the blade, first on one side and then on the other, until all remains of a feather edge are removed, a fine cutting edge results. Be careful when finishing the flat side of the blade that you hold it flat on the stone, otherwise a rounded edge will result.

Wooden planes are adjusted as follows: to tighten the blade, strike the butt of the wedge with a small hammer; to loosen the blade, strike the back of the plane several smart raps with a small hammer or a mallet. This also retracts the blade which may then be reset at the new level with a blow of the hammer on the wedge. A little practice will teach the knack.



Base ~ wood
Posts ~ Pressedwood

A Simple Coil Tester

A Simple Coil Tester

▶ We are indebted to Austin Murray, whose excellent article appears on another page in this issue, for the simple coil tester sketched. Its construction is so obvious as to need hardly any description. The materials shown may, of course, be changed to suit what you have on hand. The base, for example, might be of hard rubber instead of wood. The posts might be hard rubber or fiber instead of Prestwood, as indicated. The principal requirement is that these parts should be good non-conductors of electricity as otherwise you might get quite a jolt when using the tester. For the same reason be sure that the base is not wet when making tests. The screws should be filed to a sharp point, as shown, and brass ones are recommended, because they are non-corrosive, although steel ones will do the work.

In addition to the unit shown, you will need two short lengths of high tension cable and a couple of spring clips. Attach a clip to the end of each piece of cable and skin the other end enough to assure making a good contact. A drop of solder on these ends will keep them from fraying.

To use the coil tester, it is necessary only to remove the high tension cable between the coil and the distributor, by simply pulling it out. Insert the ends of the two wires described above in the same terminals and clip the clamps to the adjusting screws of the testing unit. Adjust these screws so that their points are in contact, being sure that you use a non-conducting screw driver. Now, start up your motor and back off one of the screws slowly until the spark fails to jump the gap. If your coil is in good shape, the spark should jump from 5/16" to ⅜", depending on the compression and speed of the motor.

HAM DE FONTAINE

SANDLOT SAILING

Or Yachtsmen Are Funny People

By LEEDS MITCHELL, Jr., 1st Lieut., Air Corps

MAYBE all enthusiasts are screwy. Anyway, it beats the cat o' nine tails to see the lengths to which the salty breed will go to get a hand on a tiller and an eye on the main luff.

When I moved from salt to fresh water, I thought the end was nigh. My first race off Chicago changed my mind, although I surely missed the salt. All water is wet. But not all sailing requires water. Witness the case of a sailor gone wrong. First of all, I got tangled with the Army instead of the Navy. Secondly, I was sent to a station on the Mojave Desert in California, 150 miles from the nearest mud puddle. YACHTING was my only link with the days of peacetime.

But I did not then realize how stubborn are yachtsmen, or even that the breed might be represented out here on the desert. One day I went into a store to buy some groceries and on the wall was a photograph of three boats, hard on the wind, heeled well over and obviously going like hell. Looking closer, with rapt expression I saw that they were ice boats, concluded that the proprietor had cut the shot out of a magazine he had seen back in civilization. Then, by the Great Horn Spoon, I saw that the boats had wheels instead of runners! Some guy had made use of the lakes in the desert, dry lakes! So I found that guy in a hurry. I had known him for some time without suspecting his psychopathic tendencies. I quickly made a date for the earliest Sunday I could get free. Forty miles over rough desert roads were hard on the car, but they rolled by quickly. A lake came into view, about 20 square miles of flat sand, packed down hard. It took about ten minutes to set the boat up. She is, as the photographs show, a Model E ice boat to the last detail except for the wheels. Then we were sailing, 150 miles from the nearest mud puddle.

There seem to have been no desert boats prior to 1936. At that time, some old desert character put a tall spar and a home-made sail on a standard automobile chassis and added a couple of wheeled outriggers for stability. This contraption

The Sand Yacht is an ice boat — except the wheels

The desert yacht tender is the family car

proved fairly efficient, given sufficient wind. My friend, Larry Larsen, and three other enthusiasts hit upon the idea of converting an ice boat, a type almost perfect for the conversion, having a tripod bearing on the ground, and designed for sailing on a hard surface.

The four went through a long search for the proper wheels and wheel size. Starting with bicycle wheels, they found them insufficiently rugged. Then motorcycle wheels, with the same trouble. Then automobile wire wheels, then disc wheels. Even these latter types were found unsatisfactory; the bearings were too weak to take the terrific side loads.

The next step was to design a bearing which would take the loads and still give a minimum frictional drag. Trial and error eventually made the grade, and the four men now have a patent on a bearing which, based on actual practice, seems to have the problem licked. At present, in conjunction with this bearing, they are using wheelbarrow wheels, the kind with the large pneumatic tires, though they are too small from the standpoint of maximum efficiency in light airs.

About two years ago the four inventors went to a friend in the sports section of one of the Los Angeles papers, whom they interested in the possibilities of desert yacht racing and yachting in general. The desert is a healthy place and is especially curative for many respiratory ailments, such as asthma, sinus, etc. At certain times of year, many people from the Coast come out here for a few weeks or months to take vacations, or to regain lost health.

Larsen and his friends thought that a Desert Yacht Club would be something worth while promoting, and the sports writer agreed with them. So, shortly after the interview, the newspaper came out with a full page on the sport, replete with photographs. That week-end there were over 2000 visitors at Mesquite Dry Lake to watch the boats. I repeat, 2000 people, most of whom had had to drive a minimum of 100 miles to get there. Larsen and the others took over 100 orders for boats that day alone, and more came in. It looked as though they had really hit something.

However, they ran up against the lately familiar story: inability to get materials and equipment — and then the War came. So now the sport lies dormant, existing only in the still enthusiastic minds of the four men and of others who were instilled with the same enthusiasm by the above-mentioned demonstration.

I quote Larsen when I say that his boat has been officially timed at 115 m.p.h. over an eleven-mile course. That sounds pretty high, but he swears it's accurate. I myself found that it takes over ten miles per hour wind velocity to move the boat, with the wheels we had and on the surface of that particular lake. Being becalmed is probably, therefore, a more frequent experience with this kind of sailing than with that to which we have been accustomed.

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EDITORIAL

To Revive the Rank of Commodore

"ONCE a Commodore Always a Commodore" is a saying that was applied exclusively to commodores of the yachting variety. However, it seems as if it is now to apply to the U. S. Navy as well. A bill recently passed Congress to restore the rank of Commodore in the U. S. Navy and, when signed by the President, it will bring back a rank that has not existed since 1899. With the growth of the convoy system, the ships of which are under the charge of an officer of flag rank, the revived title can well be used. The British have used it ever since this war started, as they did, if memory serves, in the last war. In that service, most of Convoy Commodores are retired rear admirals, called back to active duty.

The title goes back to our old Navy, when (up to 1862) any naval captain who commanded a squadron received the honorary title of Commodore. However, the number of such officers in the Civil War became so great as to become unwieldy, and the number was gradually reduced until it was finally abolished.

Many names famous in the history of the Navy bore the title. Esek Hopkins was the first, in 1775. He was commander-in-chief of the Continental Navy and led the expedition which captured Nassau. Most distinguished, perhaps, were Commodore Oliver Hazard Perry, who fought the Battle of Lake Erie, and another of the same name, his brother Commodore Matthew Calbraith Perry, who forced Japan to open her ports to American trade in 1853. Another was Commodore Stephen Decatur, who made the American flag respected in the war with the Barbary pirates in the same waters where some of our ships are now operating against the Axis.

Dewey also had the title and it was not until after the battle of Manila Bay that he was made an Admiral. There is a Navy story of an old Commodore of the Civil War period who was said to growl, when he heard the report that those holding the title were to be elevated in rank, "Want to be Admirals, do they? d—n it, they'll be wanting to be Dukes next."

The Shape of Things to Come

THE SERIES of articles appearing in the pages of YACHTING by John S. Barnes and Robert J. Woods, with a contribution by A. E. Luders, Jr., on the possibilities offered by the new plastics and plywood which are coming into such general use, are worth careful study by yachtsmen, yacht designers and boatbuilders alike. What these, and other materials which war production has brought forth, suggest as to new building methods and possible greater latitude in design may well revolutionize the boatbuilding industry as far as quantity production is concerned.

Certainly, when we start fresh after peace comes again, the lessons we have learned, and any improvements made, in turning out small boats in quantity for the armed services are going to be used when it comes to building boats for recreational purposes. Certain basic factors are still paramount in boat design and construction, such as strength, seaworthiness, stability and appearance. But there seems no reason to fear that these cannot and will not be met by the use of the new materials. What are the practical limits in size imposed by the new products is still an open question. We hope to get further opinions on this, and on the bearing on design, from those who have been working with and studying the possibilities of the new methods.

We can only say that we believe the future holds more interest for the small boat sailor than ever before.

Keep the Burgee Flying

AS THE summer draws near, it is gratifying to see that the prophets of gloom are being set back on their heels, and yacht club flag officers and committee members are making plans about as heretofore for opening the clubs and providing for the usual activities afloat and ashore. Already, racing schedules are finding their way into print, winter covers are being stripped off boats, club staffs are being hired, and the dire predictions of those who always look on the dark side of life are being refuted. This is what we expected all along would happen, and is added proof of the vigor of yachting and yacht clubs in this country.

In a recent issue of YACHTING we pointed out how vital yacht clubs are to the sport, present and future. They are, in reality, more vital now than ever before. In the matter of instruction for the juniors (to say nothing of their parents and old-timers), the effort is of prime importance and this reason alone should justify carrying on throughout the war period. This is too obvious to need pointing out. However, flag officers and committees need the support of a vigorous and interested membership, and this, we are glad to note, is what they are getting in many clubs, despite the ravages of wartime economy.

You owe a debt to your club, to the coming generations of yachtsmen and to the future of the sport. Forget the old seafaring saying that if you let go the standing part of a ten dollar bill, the rest will unreeve before you can stop it, and support your club even more generously now than you did in the past. It will be money well spent and we bet that you'll get a lot of satisfaction (and fun) out of the process.

THE MONTH IN YACHTING

HAROLD PETERS

▶ It would not be fitting to let the death of Harold Peters, while in the service of the U.S.C.G. Reserve, pass without a tribute to one of the best known and best liked of New England's cruising fraternity. He died as the result of a fall from the afterdeck of the vessel on which he was serving while she was hauled out on the marine railway at Marblehead, Mass., sustaining injuries from which he never recovered. From the deck of a Coast Guard schooner on March 18th, off Eastern Point, his ashes were scattered on the sea he loved, in the presence of friends with whom he had often sailed. It was the way "Pete" would have wished it when his call came.

Harold Peters was a born seaman — of the age of sail. His weather eye was always open and he was always prepared. This was not from a cautious nature but was a matter of professional pride. The gear *had* to be right

The late Harold Peters

and nothing was left undone that should have been done. His judgment could always be trusted. Active and muscular, he could go aloft like a cat and generally handled himself about deck in a way that was a delight to behold.

He loved the sea and the way of a vessel under sail — these, and his friends, were his chief interests in life. He brought to them a keen appreciation spiced with a humor of a Dickensian cast but of a raciness entirely his own. His mind was peopled with characters he had met alongshore and in the ports of the world and was a storehouse of anecdotes and experiences which he could illumine with a turn of phrase and dash of wit in such a manner as to be irresistible. On the serious side of his character was great strength and determination and the steadfast refusal to temporize with anything in which he did not believe. Above all, he was intensely loyal to his friends and they to him.

Born in 1888, Harold Peters learned to sail at an early age, and was on or near the sea most of his life. At the age of 17, he bought a 19-foot knockabout in which he cruised extensively between Boston and New Brunswick then and during his college years. Not satisfied with summer cruising, he made a number of winter trips in Down East coasting schooners as well as a winter trip fishing in the schooner *Josie and Phoebe*. In 1915, he shipped as third mate in the ship *Rhine*, from Boston to the River Plate.

In 1916, he joined the Naval Militia and entered the last war with rank of ensign, leaving with rank of lieutenant. Shortly after leaving active service he and Roger Griswold started to build a 60′ schooner at Charles Morse's yard in Thomaston. She was launched in April, 1920, and christened *Lloyd W. Berry*. With an amateur crew, they left Boston about July 1, 1920, to France and England *via* the Azores. On the way back, in February, 1921, they ran into a hurricane in the Bay of Biscay in which they had to run under bare poles and nearly lost the vessel.

In 1932, he served as skipper of the 85′ schooner *Pilgrim* with Donald C. Starr, the owner, and an amateur crew, on a two-year cruise around the world. They went westward through the canal, the South Seas and Mediterranean. Peters wrote an account of this in the *National Geographic* of August, 1937.

Prior to Pearl Harbor, Peters tried to get a commission in the Navy. The effort dragged on for over a year and he was finally turned down on account of age and eyesight. He then enlisted in the Coast Guard Reserve with rating of Chief Boatswain's Mate. The Navy thus lost a good officer, and the Coast Guard, by his untimely death, a seaman of wide experience and ability.

JUDGES FOR "CRUISER OF TOMORROW" CONTEST

▶ While still in the midst of the greatest war the world has ever seen, it is gratifying to note that farsighted boatbuilders are looking ahead towards the future and to the kind of pleasure craft that boatmen will be seeking when all hands return to the ways of peace. That there will be changes in the demands of yachtsmen, and also in the processes of building, goes without saying.

Some months ago, one of the well-known builders of power cruisers, the Richardson Boat Company, announced a "Cruiser of Tomorrow" contest, and asked yachtsmen and designers to submit their ideas on what the former wanted in a cruiser when the war is over, and what the latter believed would add to the appeal of the boats of the future. The awards in this contest will be made by a board of judges which has just been announced. They are: Arthur Middleton, Olin J. Stephens, 2nd, William P. Fisher, Herbert L. Stone and Charles F. Chapman.

Mr. Middleton is a former Chief Commander of the U. S. Power Squadrons, a charter member of the Corinthian Yacht Club, Washington. An ex-naval officer, Mr. Middleton served on the Army and Navy Patent Board during the last war. At present, he is serving as Chief of Staff for the Third Naval District Coast Guard Auxiliary as a

Olin J. Stephens

temporary officer in the Coast Guard Reserve.

Olin J. Stephens is one of a few naval architects who have attained international prominence at an early age. Only 34, he is considered one of our foremost designers. Mr. Stephens was one of the co-designers of the last America's Cup defender *Ranger*, on whose plan and rig he collaborated with the veteran Starling Burgess. When the Navy Department started its small boat building program, he and his firm were retained to work on the American PT's, the 110-foot sub-chasers, and other types.

William P. Fisher, President of the Fisher Boat Works, Inc., is a designer and boatbuilder of wide experience. His practical knowledge should be of great assistance to the jury. Mr. Fisher's company has turned out numerous custom-built boats and he himself has owned and operated many yachts.

Charles F. Chapman and Herbert L. Stone, both editors of boating magazines, who have been in position through many years to watch the development and trend of pleasure boat design, are the other two members.

Arthur Middleton

CALENDAR

May 2 — Opening Day Regatta, Seattle Y.C.
August 8–11 — I.L.Y.A., Anniversary Regatta, Put-In-Bay, Ohio.
August 14–15 — Annual South Shore Regatta, Vermilion Y.C.

Lake Michigan Y.A.

May 28 — Chicago-Milwaukee Race, Milwaukee Y.C.
May 30 — Regatta, Milwaukee Y.C.
June 19 — Annual Michigan City Race, Columbia Y.C., Chicago.
June 26–27 — Star Class Invitational Regatta, Jackson Park Y.C., Chicago.
July 2 — Annual Saugatuck Race, Jackson Park Y.C.
July 3–4–5 — Star Class, Sterling Morton Trophy Race, Chicago Y.C.
July 3–4–5 — Annual Garden Bay Race, Escanaba Y.C.
July 4 — Annual Lake Macatawa-Chicago Race, Chicago Y.C.
July 17 — Chicago-Mackinac Race, Chicago Y.C.
July 18 — Midsummer Regatta, Sea Gull Finals and 21-Mile Island Race, Escanaba Y.C.
July 24–25 — Annual 100-mile Race, M & M Y.C.
July 27–August 1 — Annual Cruising Race, Escanaba Y.C.
July 31–August 1 — Virginia Trophy and Milwaukee Journal Regatta, Milwaukee and South Shore Yacht Clubs.
August 5–6–7 — Lipton, Nutting, Gehrmann Trophy Races for R, S and Tumlaren Classes, Chicago Y.C.
August 15 — Regatta, South Shore Y.C., Milwaukee.
August 22 — Annual Wind Point Race, Milwaukee Y.C.
August 23–28 — International Star Class Races, Chicago (Tentative).
August 29 — Annual L.M.Y.A. Regatta at Chicago.
September 3–6 — Tri-State Race, Chicago-St. Joseph-Michigan City-Chicago, Chicago, Columbia and Jackson Park Y.C.
September 11–12 — Luts Trophy Race, Class Q (Eight-Metres to rate as Q's), Jackson Park Y.C.
September 19 — Annual Sheldon Clark Regatta, Chicago Y.C.

Y.R.A. of Long Island Sound Championship Races

May 30 — Echo Bay Y.C.
May 31 — American Y.C.
June 6 — Larchmont Y.C.
June 13 — Manhasset Bay Y.C.
June 20 — Knickerbocker Y.C.
June 27 — Seawanhaka Corinthian Y.C.
July 3 — Horseshoe Harbor Y.C.
July 4 — New Rochelle Y.C.
July 5 — Larchmont Y.C.
July 11 — Indian Harbor Y.C.
July 18 — American Y.C.
July 25 — Stamford Y.C.
August 1 — Larchmont Y.C.
August 8 — Riverside Y.C.
August 15 — Huguenot Y.C.
August 22 — New York A.C.
August 29 — Port Washington Y.C.
September 5 — Seawanhaka Corinthian Y.C.
September 6 — Larchmont Y.C.
September 12 — Manhasset Bay Y.C.
September 19 — Indian Harbor Y.C.
September 26 — Horseshoe Harbor Y.C.

Non-Championship Races

May 29 — Echo Bay Y.C.
June 5 — Larchmont Y.C.
June 12 — Manhasset Bay Y.C.
June 19 — Larchmont Y.C.
June 26 — Horseshoe Harbor Y.C.
July 10 — Echo Bay Y.C.
July 17 — Horseshoe Harbor Y.C.
July 24 — Manhasset Bay Y.C.
July 31 — Larchmont Y.C.
August 7 — Riverside Y.C.
August 14 — Manhasset Bay Y.C.
August 21 — Horseshoe Harbor Y.C.
August 28 — New Rochelle Y.C.
September 4 — Larchmont Y.C.
September 11 — Manhasset Bay Y.C.
September 18 — Indian Harbor Y.C.
September 25 — Horseshoe Harbor Y.C.

Chesapeake Bay Y.R.A.

May 23 — Shakedown Race, Maryland Y.C.
May 30 — Swan Point-Love Point Race, Gibson Island Y.S.
June 5–6 — Small Boat Regatta, Maryland Y.C.
June 6 — Regatta, Naval Academy Y.S.
June 12–13 — Rhode River Rendezvous, Gibson Island Y.S.
June 12–13 — Regatta, Baltimore Y.C.
June 19–20 — Trophy Race, Potapskut S.A.
June 26–27 — Regatta, Fairhaven S.C. (Tentative).
June 27 — Regatta, Potapskut S.A.
July 3–4 — Regatta, Rock Hall Y.C. (Tentative).
July 10 — Gibson Island-Annapolis Race, Annapolis Y.C.
July 10 — West River-Annapolis Race.
July 10–11 — Regatta, Annapolis Y.C.
July 17–18 — Regatta, J. Rulon Series for Stars, Gibson Island Y.S.
July 24–25 — Regatta, Chester Y. & C.C. (Tentative).
July 25 — Poplar Island Race, Gibson Island Y.S.
July 31–August 1 — Regatta, Cambridge Y.C. (Tentative).
August 6–7 — Regatta, Miles River Y.C.
August 8 — Race Back from Miles River, Maryland Y.C. (Tentative).
August 13 — Gibson Island-Oxford Race, Chesapeake Bay Y.C.
August 13–15 — Regatta, Tred Avon Y.C.
August 14–15 — Races, Chesapeake Bay Y.C.
August 21–22 — Regatta, Sparrows Point Y.C. (Tentative).
August 28 — Races, Naval Academy Y.S.
August 28–29 — Regatta, Indian Landing B.C.
August 28–29 — Regatta, Rappahannock Y.C.
September 4 — Cedar Point Race, Gibson Island Y.S.
September 5–6 — Regatta, West River S.C.
September 11–12 — Regatta, Urbanna Y.C.
September 11–12 — Regatta, Elk River Y.C.
September 12 — Regatta, Maryland Y.C. (Tentative).
September 18–19 — Regatta, Potomac River S.A. (Tentative).
October 3 — Start of Fall Series, Annapolis Y.C.

Intercollegiate Y.R.A.

May 1–2 — Third Annual New England Member Dinghy Championships, U. S. Coast Guard Academy Alumni Bowl; U. S. Coast Guard Academy B.C.
May 1–2 — Third Annual Middle Atlantic Member Dinghy Championships, The America Trophy; Navy A.A.
May 8–9 — Seventh Annual I.C.Y.R.A. National Dinghy Championships, Henry A. Morss Memorial Trophy; Nautical Association of M.I.T.
May 16 — Thirteenth Boston Dinghy Club Intercollegiate Challenge Cup Regatta; Nautical Assn. of M.I.T.
May 22 — Dual Meet, U. S. Coast Guard Academy *vs.* U. S. Naval Academy, Annapolis, Md.

Rosenfeld Photo

One of the AM Class of minesweepers built by Jakobson Shipyard, Inc., Oyster Bay, L.I.

YACHTSMEN WILL HELP TRAINING PERSONNEL FOR WAR

▶ When Commodore George Roosevelt, of the New York Y.C., said recently that the one object of that organization for the duration would be to contribute to the war effort, the attitude seemed to reflect the feeling of yachtsmen generally throughout the country.

Pleasure boating in the past has been one of the most valuable training schools for the sea services, and many yacht owners are fitting out this season so that that effort can be continued, particularly in training juniors who may later be called to duty in the armed services, and also to coöperate with the Coast Guard when and if necessary.

The Seamanship Training Corps, an organization sponsoring a seamanship course for high school boys, has asked boat owners to take boys on the water as part of their training, and many boat owners have already volunteered to coöperate. Training courses are already in operation in many parts of the United States.

It is particularly interesting that many who now have positions of responsibility in the Navy, received their early training in the junior sailing activities of their respective yacht clubs, and most yacht clubs will, in 1943, make their junior activities of even more importance than usual.

Every owner who gets juniors afloat and helps develop our future seamen, will play an individual part in the Seamanship Training program, in addition to the pleasure he may have on the water.

SOUTHERN Y.C. ELECTS

▶ The ninety-fourth annual meeting of the Southern Y.C. was held late in March and the following officers were elected: Commodore, Leslie P. Beard; vice commodore, Charles McLellan; rear commodore, Richard G. Jones; secretary-treasurer, J. B. Ravannack.

A CORRECTION

▶ Dr. Harlan T. Stetson, of M.I.T., writes us regarding the article "It's All Done With Spheres," on page 43 of our April issue, in which we referred to him as the author of *Map Reading and Avigation*, that he is the co-author, having collaborated with R. M. Field, Professor of Geology at Princeton. YACHTING regrets the omission of Professor Field's name in the article.

POST-WAR YACHT

Another in YACHTING'S Series of Small Cruiser Designs

By ROBERT G. HENRY, JR.

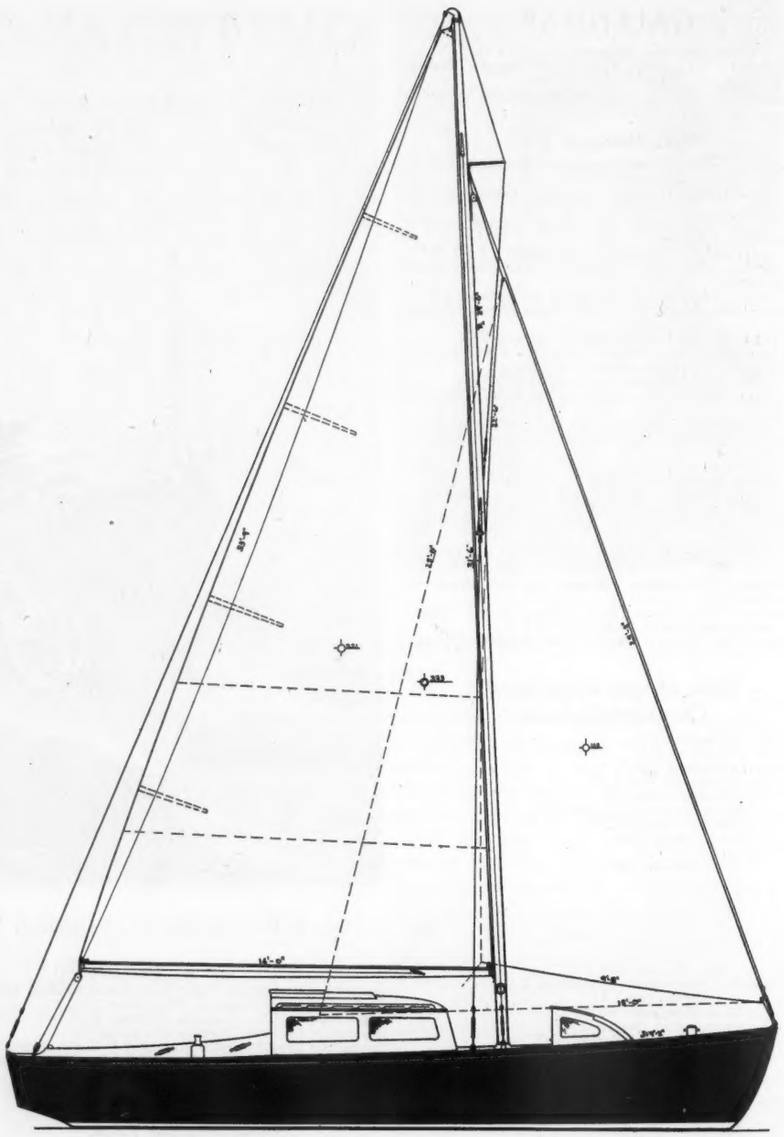
THE SLOOP shown herewith is normal in her dimensions, displacement and scantlings. She is 26′ 0″ in length over all, 22′ 1″ on the water line, 8′ 2″ maximum beam and 4′ 6″ draft. The lines and profile are pleasing and she should be quite fast as well as a good boat in rough going.

The designer has never cared for the "two story" effect in small cruisers in which a doghouse is added to a long trunk cabin. At the same time, he feels that full headroom is one of the greatest elements of cruising comfort and should be provided for in the small boat, if possible. The solution was to eliminate the cabin trunk entirely and have a deckhouse with full headroom under its entire length. This deckhouse affords wonderful light and ventilation below as well as increased deck space above. The forward side windows slide aft and the after side windows are fixed. The forward end of the deckhouse has two solid panels, with a 5″ deadlight in each, which open like the windshield of a power cruiser. Light and ventilation below are thus provided without cluttering the deck with skylights and ventilators to stumble over at night and to be the sources of potential leaks. The deckhouse is pleasing in appearance and not at all difficult to construct.

The booby hatch forward provides headroom over the toilet and can be turned around to act as a wind scoop. It is large enough to pass sail bags through without tugging and straining.

Below deck, the cabin arrangement is roomy and convenient. The two berths on the starboard side give a feeling of spaciousness. The mattresses of these berths may be made in one long one so that, with but two persons aboard, the man on the starboard side may sleep nearly amidships. The berth to port is wide for a boat of this size. This three-berth arrangement also provides good sitting room when guests are aboard. The toilet location provides good room and some privacy. Complete privacy in a boat as small as this one is impossible unless galley space or living accommodations are sacrificed.

The galley arrangement will appeal to any seagoing cook and the space allotted to it is equal to that in many larger boats. There is a locker to starboard for pots and pans, the top serving as one of the companion steps. There is also good locker space under the two-burner alcohol stove to port. Above the stove and outboard are dish racks, a locker, and glass racks. The ice box will hold about 100 pounds of ice besides food and the flat top serves as part of the dresser surface. The sink is near the center line so that a discharge pump is not needed. Lockers and stowage bins are ample and practically every inch of available space has been utilized without crowding the cabin arrangement. An example of successful planning is the omission of the companion ladder which, in most small boats, takes up so much valuable space.



The sail area of the working sails is 331 square feet, all inboard

There is no companion ladder, as such. Instead, there are two steps, one the top of the pots and pans locker and the other the top of the galley dresser. Access to the engine is through removable panels under the sink and at the foot of the after berth. A large deck plate can be located in the cockpit for working on the engine and stuffing box.

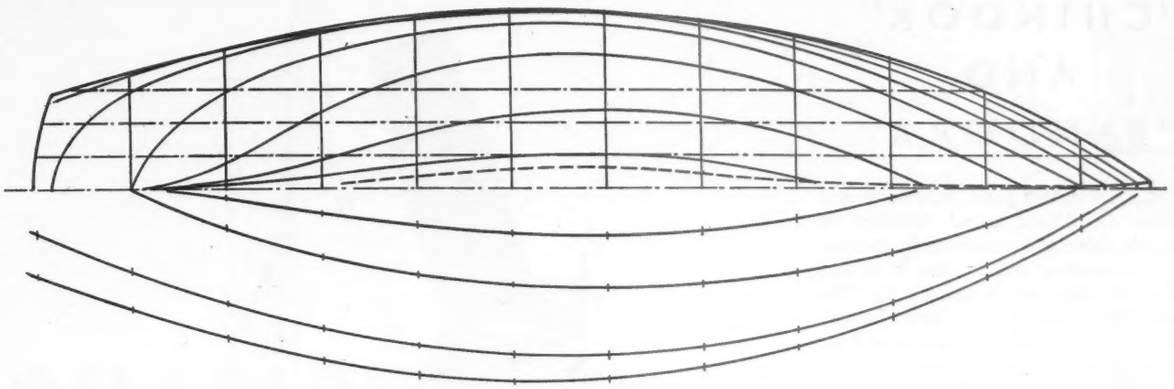
The cockpit is roomy and is long enough to sleep in. The coaming is high enough to form a comfortable back rest and the tops of the seats hinge up to permit stowage of gear under them.

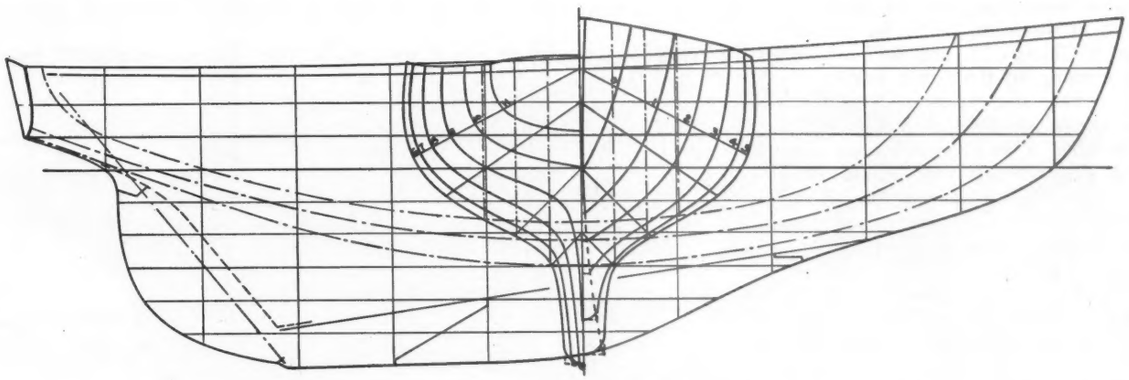
The sail plan is modern and the boat is rigged without running backstays. In addition to the working sails, genoa and spinnaker are provided. A winch on each side of the cockpit coaming will handle genoa and spinnaker sheets as well as the working jib sheet in a blow. A reel winch is fitted for the main halliards which are of 6 by 19 wire. Where racing rules do not tax sail area heavily, a halliard may be led to the masthead to be used for a masthead spinnaker or to set a light ballooner flying. The cost of the winch may be offset by the labor of making the splice between the wire part of the halliard and the hauling part.

The engine is a Gray Light Four developing 16 hp. at 1800 r.p.m. It drives the propeller direct. The designed speed under power is about 6½ m.p.h. The propeller is on the center line, which makes docking in close quarters easier than with an offset wheel.

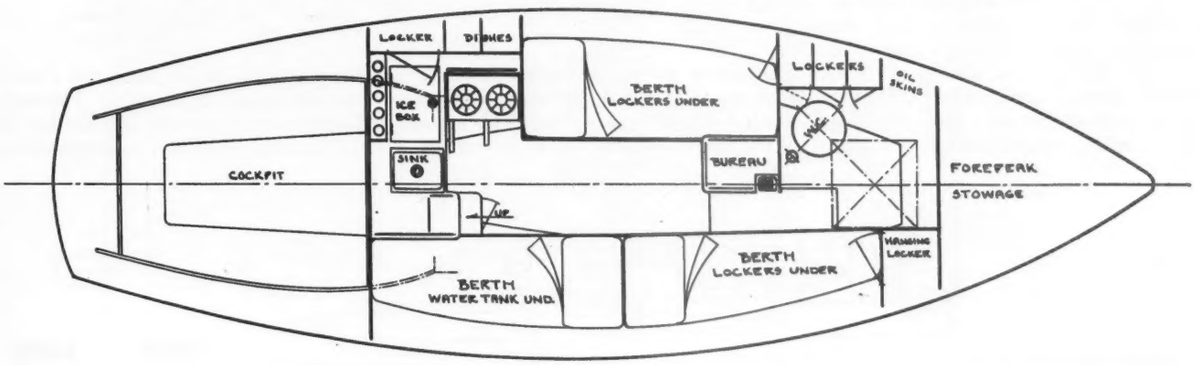
Hull construction is not radical and oak framing, mahogany planking and bronze screws are specified. The screw heads are not plugged but set in slightly and payed. This not only saves labor but provides a stronger plank and, with so many good compounds on the market, the smooth finish should last for years. Most of the small Navy boats use this method. The outside ballast may be either lead or iron — maybe silver after this war is over — and the weight is about 3800 pounds.

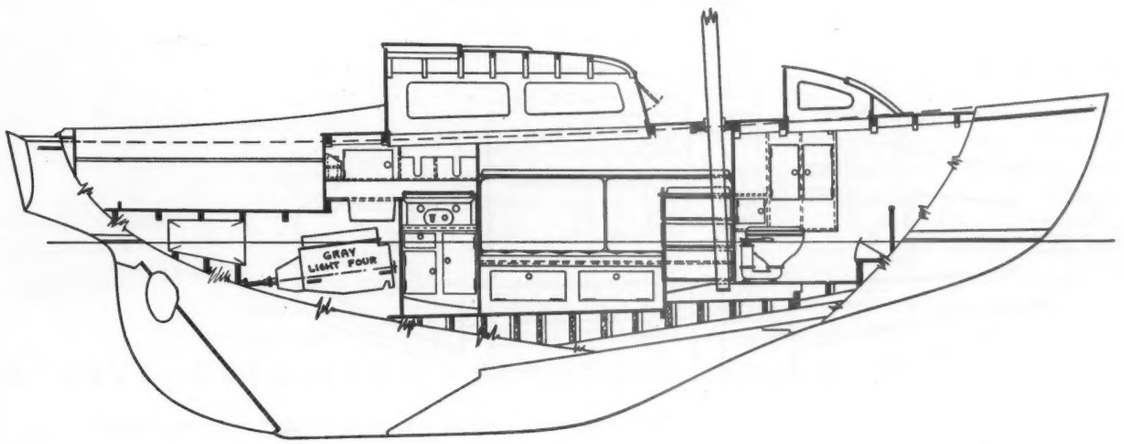
The plans reproduced in this section are the property of the designers under whose name they appear. For further information concerning any design address the naval architect in question.





The lines show a model which should be able and quite fast. She has easy fore and aft lines and good stability. Below, the cabin plan and inboard profile show a practical arrangement of the living quarters



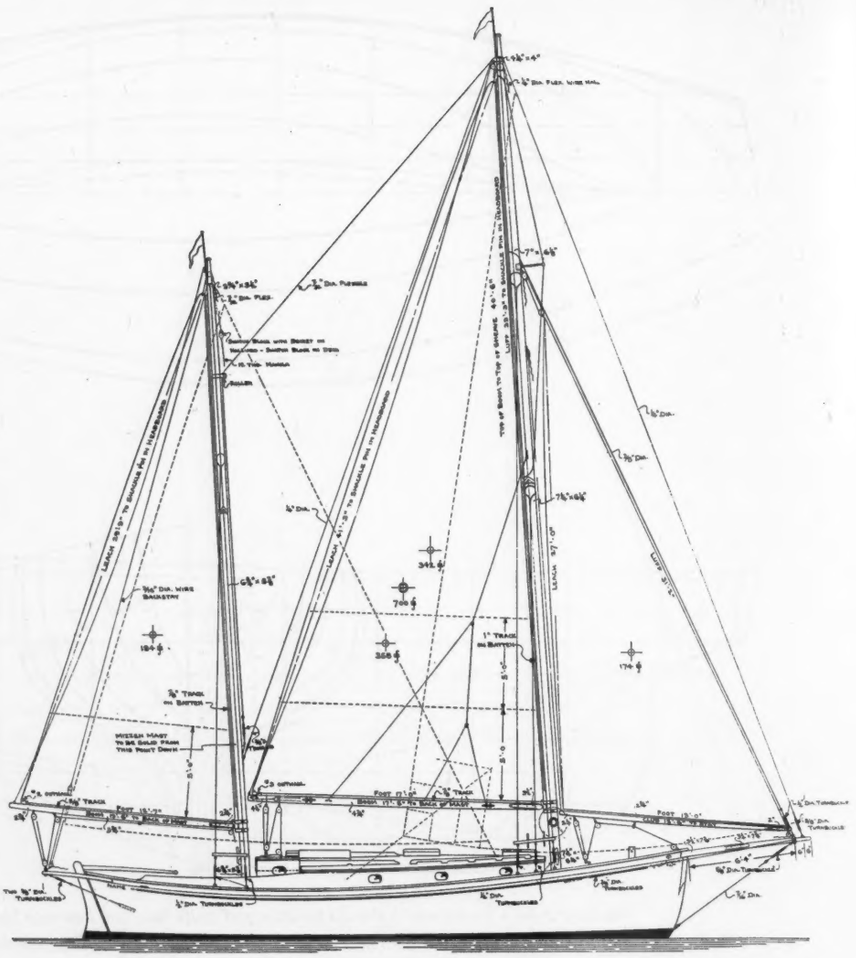


"CHINOOK" AND "PANDORA"

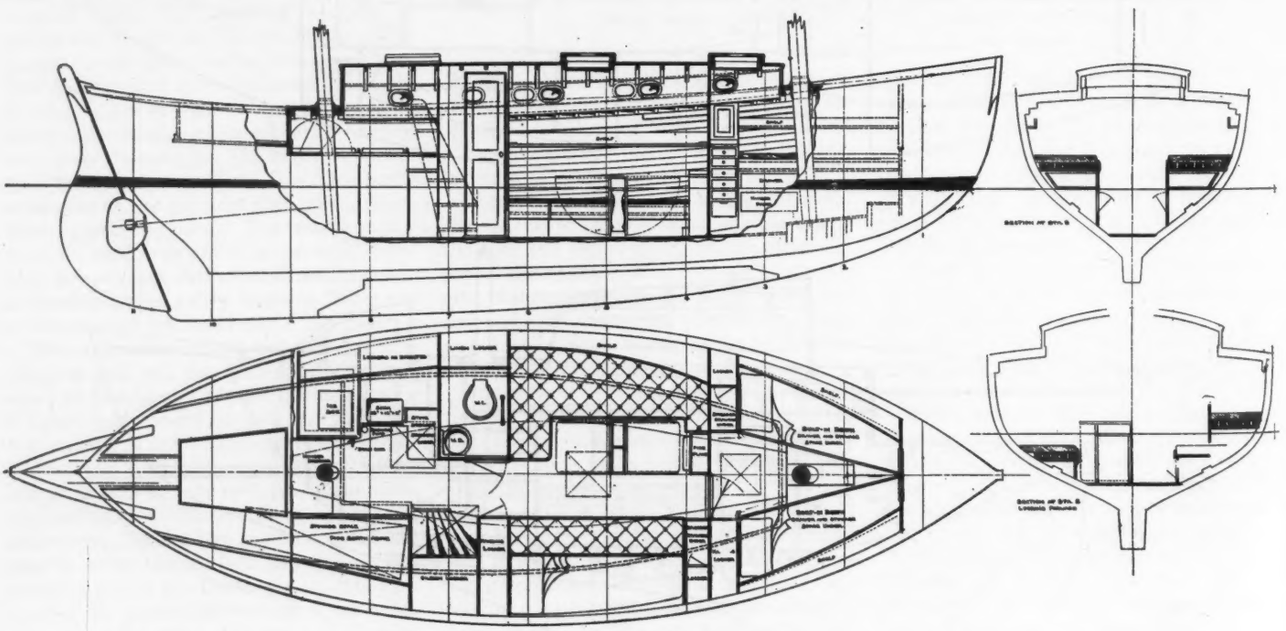
THE PLANS on this page, from the board of John G. Alden, naval architect of Boston, are those of a comfortable cruising ketch of interesting design. She is of the double-ended type, with a modern rig. The principal dimensions are as follows: Length over all, 35′ 0″; length on the water line, 32′ 0″; beam, 11′ 3″; draft of water, 5′ 0″. There is 7000 pounds of iron on the keel and a small amount of trimming ballast inside.

Two boats have been built from these plans, for localities as far apart as Lake Michigan and Long Island Sound. *Chinook*, the first of these, was built by Scott J. McBurney, of Brooklyn, N. Y., for Luther W. Tatge, of Chicago, Ill., and she has been used for cruising on the Great Lakes. As auxiliary power, she carries a 6-cylinder Chrysler engine of 3⅛″ bore and 4⅜″ stroke, installed a year or two after the yacht was first put into commission. The other is *Pandora*, built by Sidney Davies, of East Rockaway, L. I., now owned by Harlan T. Moses, of Warren, Rhode Island. Her motor is a 2⅞″ by 3½″ Gray. *Chinook* has sails by Ratsey while those of *Pandora* were made by Louis Larsen. The two sail plans are identical, there being a total sail area of 700 square feet. Of this, there are 174 square feet in the jib, 342 in the mainsail and 184 in the mizzen.

The plans show the attractive appearance of the two boats and their somewhat unusual cabin arrangement. The galley is abaft the companionway so that one does not have to pass through the galley when going below. The cook is thus not annoyed by having the rest of the crew crowd past him every few minutes. Abaft the companionway is a pipe berth and on the opposite side is a compact toilet room. In the main cabin, there is a built-in berth outboard with a settee inboard on the starboard side while to port is a dinette with a folding table and a seat wide enough for one to sleep on. Forward is a double stateroom, with two berths, dresser and hanging locker as well as stowage space.



Sail plan and profile are attractive, with modern rig and good sheer



Accommodation plan and sections. The layout of the cabin is unusual, with the galley abaft the companionway

CHAMPION SPARK PLUGS

provide the vital, life-giving sparks for many a fast, shifty, hard-hitting P. T. boat—the Navy's great little bantamweight champion with the heavyweight punch.

Bantamweight with a heavyweight's punch, the Navy's P. T. (Patrol Torpedo) boats are the hardest slugging ships for their size and weight that ever chased an enemy marauder into its very lair. Depending almost entirely upon speed for self-defense, the P. T. is crammed full of horsepower as responsive to throttle and as flexible in its range as your car. Because they appreciate the top-notch condition in which their engines must be maintained, the men who man and love these boats pay particular attention to spark plugs—insisting on absolute quality and rigid service inspection. You who must get the utmost economy and dependability from your boat can do no less.

Generally curtailed use of marine engines, running at slower speeds, and lower octane gas all cause fouled spark plugs which waste gas and cause rough, unsatisfactory engine performance. Combustion temperatures simply don't get high enough to burn off carbon and oily deposits as readily as at former higher speeds—longer trips. For maximum economy and dependability check, test and clean your spark plugs at regular intervals.

TO SAVE GASOLINE—KEEP YOUR SPARK PLUGS CLEAN

A CENTERBOARD DAY SAILER

THIS IS the third step in the development of this type of day sailer which has come from the board of Henry A. Scheel, formerly of Provincetown, Mass. She is a good sized centerboard day sailer of the following principal dimensions: Length over all, 20′ 0″; beam, to the outside of the guard rails, 6′ 8″; draft to the bottom of the keel, 14″; draft with centerboard down, 4′ 2″.

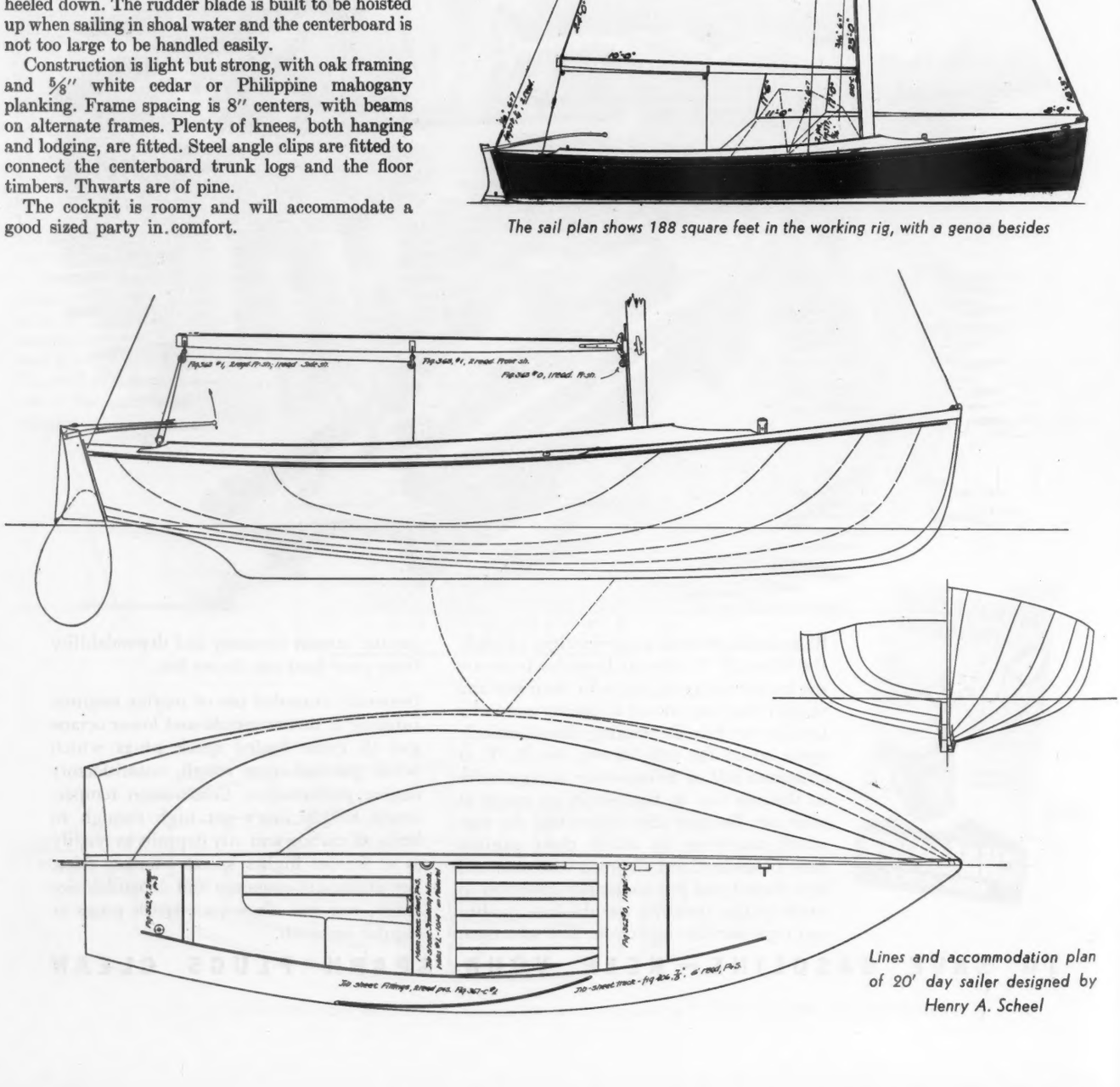
Stem and transom are nearly plumb, giving a long water line, and the fore and aft lines are exceptionally easy so that the boat should be fast in a breeze. With her small sail area of only 188 square feet in main sail and working jib, she is a bit undersparred for conditions as they usually are on Long Island Sound in summer weather but the addition of light sails will bring her sail area up to a respectable figure for light going. She should be fast and handy.

A slight reverse flare forward should keep a lot of spray off the forward deck and the narrowed deck line aft should make her easy on her helm when heeled down. The rudder blade is built to be hoisted up when sailing in shoal water and the centerboard is not too large to be handled easily.

Construction is light but strong, with oak framing and ⅝″ white cedar or Philippine mahogany planking. Frame spacing is 8″ centers, with beams on alternate frames. Plenty of knees, both hanging and lodging, are fitted. Steel angle clips are fitted to connect the centerboard trunk logs and the floor timbers. Thwarts are of pine.

The cockpit is roomy and will accommodate a good sized party in comfort.

The sail plan shows 188 square feet in the working rig, with a genoa besides



Lines and accommodation plan of 20′ day sailer designed by Henry A. Scheel

WATERFRONT NEWS

By "BEACHCOMBER"

A NEW FIRE EXTINGUISHER

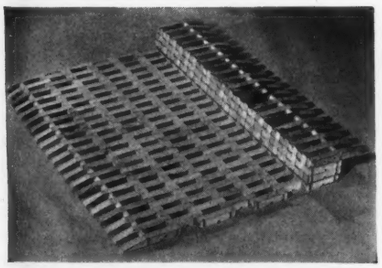
▶ The General Detroit Corporation has recently introduced a new carbon dioxide fire extinguisher which, it says, has been designed along radical lines. Its description indicates that the C-D/FOG brings to CO_2 application the same engineering advancement as represented by the *Fire Guard* in the vaporizing liquid fire extinguisher field. The carbon dioxide discharge kills fire in a few seconds by penetrating to every corner where fire exists, excluding and replacing the oxygen necessary for combustion.

PRESERVATIVE FOR COTTON ROPE

▶ A NEW product has been added to the list of test tube developments by researchers who are chasing after alternates for critical materials. This product is a toxic preservative for cotton rope.

Cotton rope, inherently a softer rope, should have a preservative before it can be employed for marine use. While cotton rope, for most purposes, has adequate strength, organisms in sea water are hard on cotton, causing the rope to deteriorate. This newly-developed preservative toughens and stiffens the rope, and gives it wear resistance and firmness. It also reduces unlaying of the strands and, in general, increases its efficiency.

The formula for this preservative was developed in the technical research laboratory of I. F. Laucks, Inc., Seattle. It is a clear liquid toxic in which the rope is dipped long enough for complete penetration, then dried. The treatment is relatively short, the time element depending, of course, on the size of the rope.



Flexible Wood Link Matting makes for safety underfoot, is comfortable to stand on, and affords good drainage. The ends are beveled to reduce the danger of tripping. It comes in natural wood color and is inexpensively priced

FLEXIBLE WOOD LINK MAT

▶ The development of substitute materials in the manufacturing of matting became a vital necessity when rubber and other materials were put on the critical list. The most recent development, Flexible Wood Link Matting, has just been announced. This mat is substantially constructed of wood links. It is light in weight and can be rolled or folded up for easy handling and cleaning; lying flat, it follows the contour of the floor.

The mat is 1″ thick, and comes in stock sizes, 18″ x 32″, 24″ x 38″, and 30″ x 44″, but can also be obtained in special sizes of any length and up to 36″ in width. American Mat Corp., 1711 Adams St., Toledo, Ohio.

DEAN UNIVERSAL ANGLE DRIVE

▶ This Universal Angle Drive has been developed for the operation of valves, skylights, ventilators, etc., principally on shipboard. When used with two universal joints, almost any angle of operation may be obtained.

The unique feature of the drive is that, while one shaft remains fixed in either a horizontal or vertical position, the other may be rotated around the axis of the fixed shaft through an angle of 180° and locked in any position within this range. When used with two universal joints, an additional angle of 20° is available on either shaft and a further adjustment is obtained by revolving the base through 90°, by aid of the circular slots.

For shipboard use, the frame is of cast bronze, the gears of bronze and the shafts of stainless steel. Although designed for hand operation, it is capable of transmitting approximately one half horse power at speeds not exceeding 300 r.p.m. Payne Dean & Co., Laconia, N. H.

"Struck . . . No! I Haven't Begun to Fight!"

THESE WORDS, flung from the quarter-deck of the crushed and flaming Bonhomme Richard, not only told the Captain of the British Serapis what he was up against, but they served to express the spirit of John Paul Jones and the American Navy for all the years to come.

The Bonhomme Richard and the Serapis, frigates of forty and fifty guns, respectively, held their historic engagement off the coast of England on the night of Sept. 21, 1779. The first broadsides from both ships were fired simultaneously at point-blank range, the first round from the American heavy artillery exploding two of the big guns and causing the abandonment of the heavy battery.

After this tragedy, Jones realized that his only chance was to work in close, and finally succeeded in running the Bonhomme Richard's bowsprit across the stern of the Serapis. There followed a brief lull in the battle and the British Captain called across, "Have you struck?" and received his immortal answer. At this point, when defeat seemed almost certain, an American seaman crawled out on the main-yard of the Bonhomme Richard and began tossing grenades with such accuracy that he soon had driven most of the British crew below.

But the Alliance, a frigate supposedly under the command of Jones, came on the scene and began pouring broadsides into the Bonhomme Richard instead of the Serapis. After the Alliance finally bore off, the Bonhomme Richard was certainly doomed.

Instead of surrendering, however, Jones drove his men to fight even more fiercely and it wasn't long before the mainmast of the Serapis crashed overboard, taking the mizzen with it. Captain Pearson realized that he was helpless and struck his colors. It was a glorious victory for Jones . . . and hardly less glorious for the British Captain . . . for he was knighted for his part in losing the battle.

★ ***Such was the fighting spirit of the American Navy in 1779 and so it is in 1943 . . . Hubbard's South Coast Company is proud to be building fighting ships for the men who are carrying on these traditions.***

HUBBARD'S *South Coast Co.*

NEWPORT HARBOR, CALIFORNIA

That craft you want to own some day is now being created at the Truscott yards, where ships for fighting men are under construction today.

New and better materials—methods—and designs are the natural result of stepped-up wartime production . . . and the advanced knowledge of Truscott engineers and veteran craftsmen will set a new high standard of excellence—utility—beauty and performance—for you to enjoy. Like so many other yachtsmen—present and future—your dreams may include a "ship of tomorrow." Perhaps those War Bonds you are accumulating now will make this vision a reality.

TRUSCOTT BOAT & DOCK CO.
ST. JOSEPH · MICHIGAN

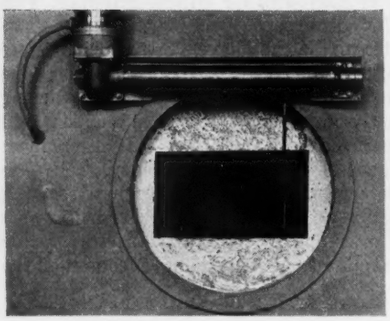
STEAM OR HOT WATER SUPPLY FROM DIESEL ENGINE EXHAUST

▶ The Maxim Silencer Co.'s newest product, the MSCH Waste-Heat Boiler, is creating considerable interest among operators and owners of vessels propelled by internal combustion engines.

Utilizing the waste heat from engine exhaust, a simple, compact combination unit of the Maxim spark arrestor silencer and boiler efficiently generates steam or hot water for heating the vessel, driving auxiliaries, or distilling fresh water from sea water. Moreover, there is no more back pressure than that of an equivalent silencer. Through the use of an evaporator, sufficient fresh water may be distilled to reduce materially the size of fresh water tanks, which consequently permits carrying additional fuel oil. Operated at its full efficiency, the waste-heat boiler cuts fuel bills and, frequently, increases cruising range from 15 to 20 per cent.

Extended surface construction, supplemented with integral expansion joints, allows for operation of the boiler with water at any level or entirely dry, without harm to the unit or engine. The steam rate is controlled automatically by the amount of water in contact with the heating surface, a feature which saves fresh water by preventing the usual waste of excess steam through the safety valve. There is usually plenty of reserve steam even when the boat is adequately heated.

MSCH compact construction permits installation in the stack or vertically in a suitable location above the engine room, in space equally occupied by a spark arrestor-silencer. Other models, for horizontal installation, are also available.



THE WEATHER MASTER WINDOW WIPER

▶ The Lord & Burnham Co. has just announced that it has taken over the manufacture, sales and distribution of the Weather Master Window Wiper. Ruggedly designed to meet all weather conditions, it is to be found on many ships of the Navy, Army and Maritime Commission. Lord & Burnham Co., Irvington, N. Y.

ON THE CARE OF BRUSHES

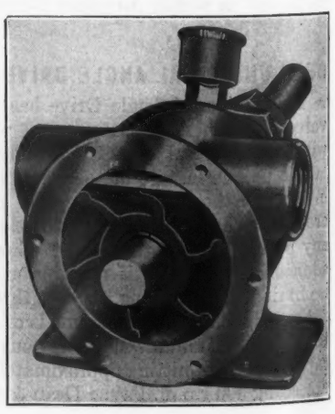
▶ New instructions in the care of paint, varnish and lacquer brushes, now being manufactured from war-created substitutes, have been released by The Osborn Manufacturing Co. of Cleveland. In its booklet entitled "Care and Conservation of Brushes" are several reasons why proper care of brushes is imperative. Some of the suggestions in the booklet are:

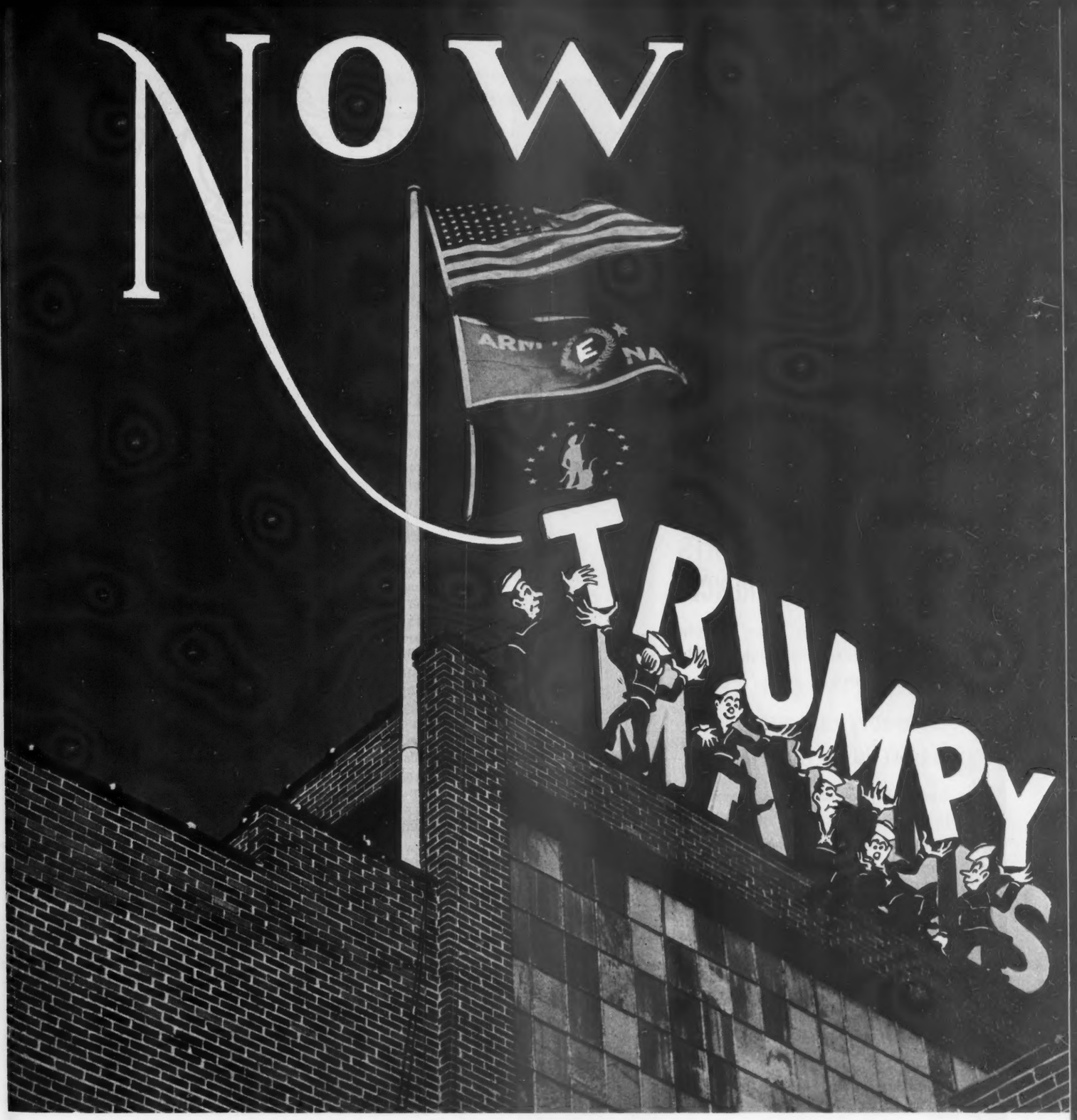
Never pound, daub or force the brush into corners or other narrow places. Never use a brush edgewise. Never submerge the entire length of the bristle in the paint. Never use a large, flat brush when working on pipes or other round surfaces. Paint only with the flag end of the brush. Use a small brush for a small or narrow surface and a large brush for a large surface. Use a worn brush for the first and second coats on rough surfaces; never a new one. Kerosene is an enemy of the brush. Always use the right brush for the right job. Placing a paint brush in water before or after using is wrong and harmful.

The booklet gives many other helpful details on the way to break in a new brush and preserve it. It may be obtained by writing The Osborn Manufacturing Co., 5401 Hamilton Ave., Cleveland, Ohio.

NEW TYPE OF PUMP

▶ A new type of self-priming pump with but one moving part has recently been announced by the Jabsco Pump Co. It is extremely simple in construction and operation, a single Neoprene synthetic rubber impeller being the only moving part. Pumping action is said to be positive and the pump does not require priming each time the machine is started. Jabsco Pump Co., 8302-8306 Wilshire Blvd., Beverly Hills, Cal.





MARCH, 1942—We receive first Navy "E" awarded to a shipyard on the Delaware.

NOVEMBER, 1942—Army-Navy "E" flag with star indicating continued excellence of production, despite problem of equipping and moving into our new, larger plant.

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100% of our enlarged facilities—and increased working force—are now at Uncle Sam's command building 110-foot SC's.

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Formerly MATHIS YACHT BUILDING COMPANY

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FOUR NIGHTS... or Forty ON THE OPEN SEA

WINNER WATER LIGHTS CAN MAKE A DIFFERENCE!

Because they float in an upright position with a bright light visible for many miles.

APPROVED BY MERCHANT MARINE INSPECTION—U. S. C. G.

Automatic; no switches to operate or mechanical parts to get out of order. Light the instant they hit the water. Burn continuously a minimum of 10 hours. Can be extinguished by inverting the case.

Absolutely safe; will not explode as no gases are created; will not set fire to floating oil or gasoline.

Equipped with metal ring for attaching to raft, float, buoy, etc. With metal holder for securing to rail or flat surface.

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U.S. COAST GUARD AUXILIARY NEWS

▶ From *The Stand-By*, the always interesting bulletin published by the Auxiliary of the 11th Naval District, comes authoritative word regarding the new Associate Member plan:

"Effective immediately, Flotillas may enroll non-boat owners as Associate members. This ruling is much more significant than it may appear at first glance.

"Care must be exercised in the selection of the Associate member, the plan must not be construed simply as a means to swell numerical strength. The potential for these members primarily lies in that vast number of men who, (a) are former boat owners, (b) men who have a love for the sea but for reasons beyond their control have never been able to own a boat, (c) professional men such as doctors, radio experts, men of diversified mechanical experience, etc.

"We have devised a simple plan of controlling Associate member ratio. They may be enrolled on the basis of one Associate member for every ten feet of craft in the Flotilla — that is, of a type suitable for at least limited offshore work such as evacuation, picking up survivors, etc. At no time shall the total number of Associate members enrolled in a Flotilla exceed the enrollment of regular members. Example: Boat length, 40 feet; Regular member, 10 feet; 3 Associate members (10 feet each).

"The status of Associate members is as follows: (a) Enrollment is not for any specified time — membership cards specifically state 'Good until revoked.' (b) They cannot hold office in the Auxiliary. (c) They have no voting status in the Auxiliary. (d) They are eligible for ranks and ratings in the Temporary Reserve the same as a regular Auxiliarist, in so far as recognition of their ability is concerned. (e) Associate members may avail themselves of educational classes, meetings, task operations, patrols, etc., in the same manner as regular members, and will be expected to do so. Auxiliary flags and pennants may not be flown on a vessel unless a regular member is aboard.

"We are convinced this Associate membership plan is justified and sound and will look to each Flotilla Commander to take full advantage of the possibilities and added effectiveness that it provides."

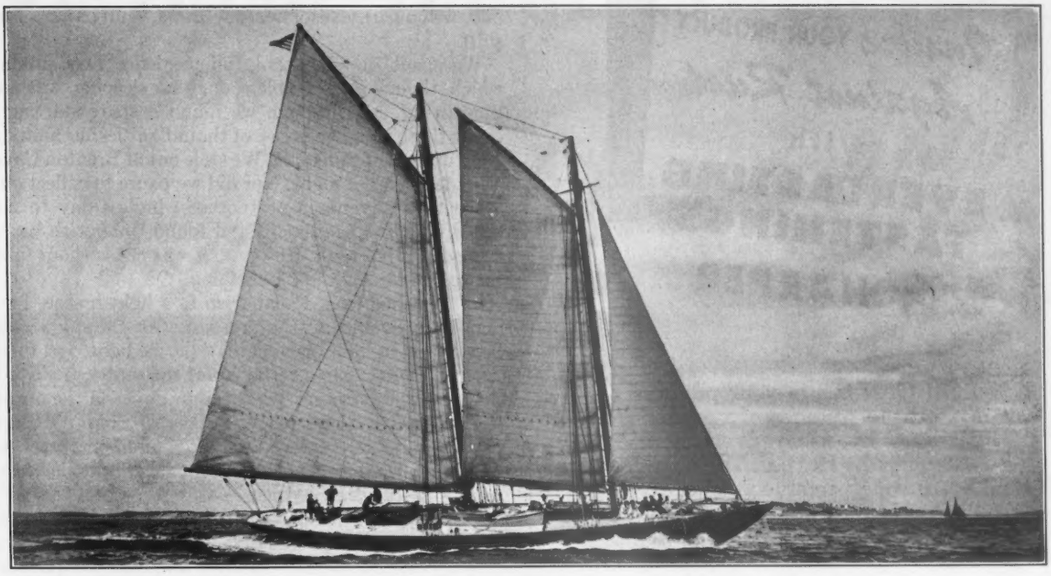
▶ Mrs. Charles K. Maytum of Rochester, Minn., the only woman in the United States serving as an officer with Coast Guard floating units, was recently in St. Louis conferring with officials of the Ninth Naval District.

Mrs. Maytum, Commander of Flotilla 8, Division 1, of the Coast Guard Auxiliary at Rochester, was elected Commander last spring, when her flotilla was organized. The flotilla now boasts of twenty-eight members with twenty-three boats on the active service list and, under Mrs. Maytum's command, it has successfully conducted two trial patrols of the Lake City area as well as actual patrol work during a three-day "alert."

▶ While the wartime operations of Coast Guard vessels within the Twelfth Naval District, a division of the Western Sea Frontier, must in most cases remain as "restricted information" because of the nature of their assignments, some idea of the work being done by members of the Auxiliary and Temporary Reserve may now be told.

Operating their yachts and power cruisers in waters where shipyards, including those of Henry J. Kaiser, are turning out vessels at an unprecedented rate, Auxiliary members are called upon frequently to assist regular Coast Guard patrol boats in insuring that no mishaps occur at the launchings.

Five New Orleans Flotillas in formation



"Cleopatra's Barge II" is now on patrol duty for the Coast Guard — another branch of the naval services for which we have converted famous yachts

Yacht Builders for Four Decades

ROBERT JACOB, INC.
City Island, New York

Meantime, the task of keeping the San Francisco Bay area free of driftwood and floating debris is one which in large part has been delegated to the Auxiliary. That these waters be kept clear is particularly important in view of the tremendous amount of airplane operations. Such debris, if left floating about, could do serious damage to the hull of any plane which might make a landing on the water. More spectacular, perhaps, was the splendid work done by the Sacramento flotilla recently when its members took in tow more than $100,000 worth of small craft which had gone adrift during a severe wind and rain storm, California's worst in a decade.

Commodore of the Auxiliary is Norman N. Carr, a one-time winner of the Overall Trophy in the Sacramento Race, and a director of the Golden Gate Y.C. Vice Commodore A. D. Owen, of Oakland, was president of the Pacific Inter-Club Y.A., and is a past commodore of the Oakland Y.C.

▶ Florida Flotillas of the Coast Guard Auxiliary are being kept busy these days according to information received from Seventh Naval District.

Recently, Flotillas 1 and 4 in the Miami area were called upon to assist the Coast Guard in a search for a missing commercial fishing boat. Within an hour after the request was received by the commanders, there were 31 Auxiliary craft and 76 members gathered at the Base ready to go. William E. Boyce, Commander of Flotilla 4, has been drilling his members in a maneuver he calls "picking up survivors." The "survivors" are wooden frames surmounted by tiny flags. In a recent drill, 100 such objects were scattered over Biscayne Bay. Every one was recovered.

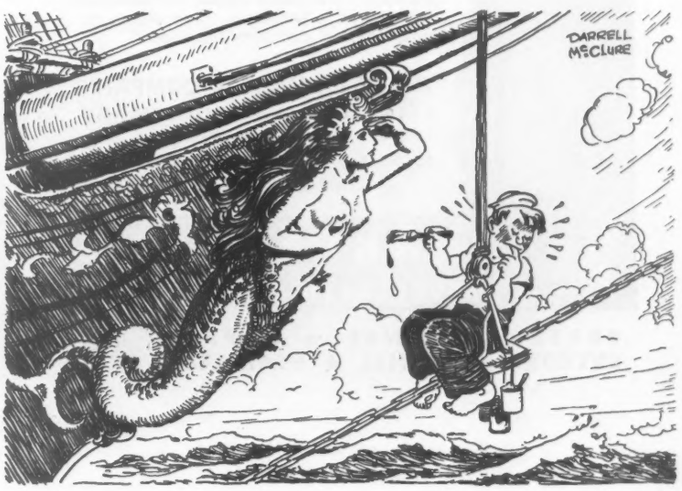
Russell T. Pancoast, Vice Commander of Flotilla 1, Division 2, announces that the Flotilla now has a membership of 55 and 30 boats. From Mount Dora, where Flotilla 10, Division 1, is located, comes word that constant stand-by service is being maintained on Lake Harris. This is at the request of the commanding officer of a near-by air base.

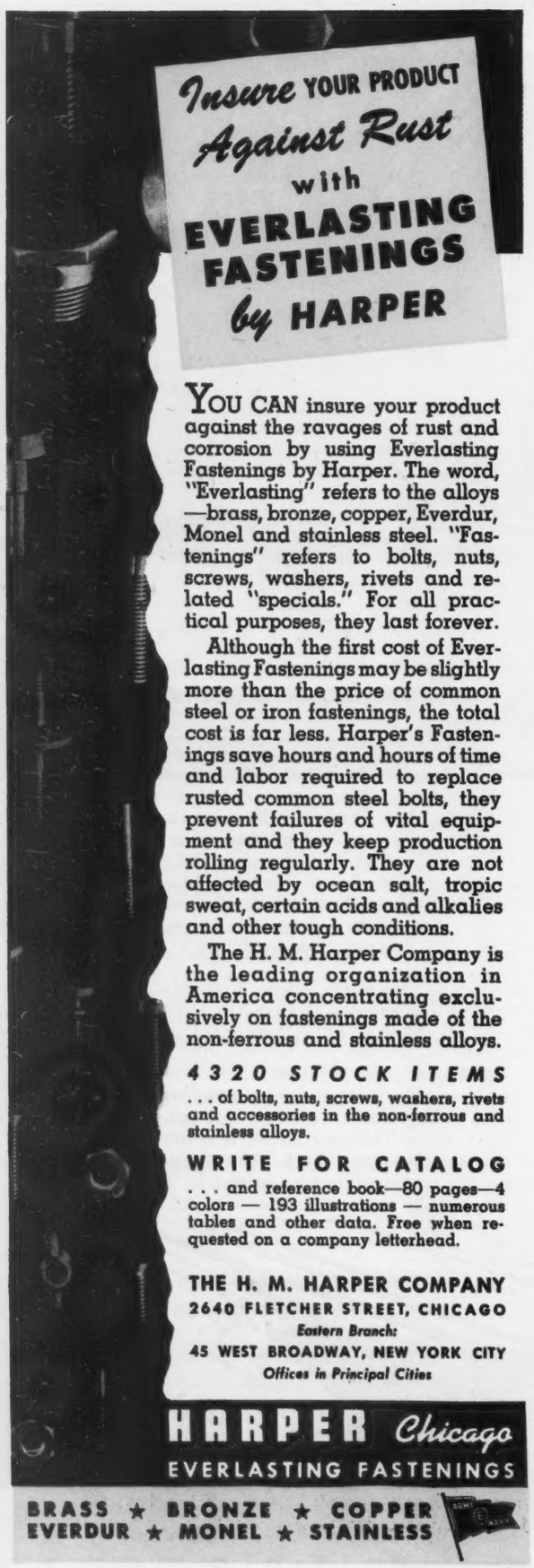
The Vero Beach Flotilla has a novel shallow draft boat which is driven by an airplane propeller. She was furnished by the Navy and with her the members can go hedge-hopping around the marshy back country or anywhere that they can find so much as a spot of dew. In Fort Lauderdale, 25 Auxiliary members have been sworn into the Temporary Reserve and are maintaining daily patrols over the target area in the offshore waters, at the request of the Naval Air Officers. At Daytona Beach, a tug with a tow of three barges was swung on a bar when the tow lines became fouled. The crew of the tug were removed to shore by an Auxiliary vessel.

Combating adverse weather conditions, Commander Gud Dekle, Flotilla 1, Division 5, Dekle Beach, Florida, assisted by Wiley and Roy Towels, Junior Bodiford and Don Cameron, took an active part in a three-day search for the body of a pilot whose plane had crashed into the Gulf of Mexico about five miles offshore. The pilot's body was found with the aid of glass-bottom buckets. A similar instance occurred near Tampa. At John's Pass, where a plane had crashed, the pilot's body was recovered by dragging operations conducted by Robert B. Lassing.

▶ In an impressive maneuver designed to facilitate speed in organization in the event of an emergency, the five New Orleans flotillas of the Coast Guard Auxiliary staged a "Little Dunkerque" on Lake Borgne in February. Skippered by Auxiliary members from the New Orleans area, a half hundred craft participated in the event.

With perfect timing, the militarized pleasure vessels proceeded in formation without mishap as they swept down into Lake Borgne, swung around and headed in again. The entire maneuver lasted but two hours and was termed a "complete success" by Lieutenant (j.g.) T. E. Mathes, special assistant to the Auxiliary director, Commander T. Y. Awalt.

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"THEM CRUISIN' WOMEN"

(Continued from page 27)

breath of wind to stir their flaunting holiday signals or our sails! We experienced the agonizing shame one feels in nightmares that drop one, without rhyme or reason, into a ballroom, clad in nothing but one's shift.

We spent that long hot Independence Day sulking inside our cabin which, though comfortable enough for sleeping, was not designed for daytime living. And, though we found a spare starting cord, a repetition, under those haughty noses, of the indignities our motor had already heaped upon us, was unthinkable. We stole out of Brenton Cove as we had entered it, under cover of night. Nor did we pause to collect our mail at Newport.

We took advantage of another windless day to make ourselves conversant with our outboard and found, that with her wires dry, she performed as advertised. However, it was not without misgiving that we laid our course for the Cape Cod Canal.

As we sailed from Padanaram in a light breeze, I consulted the Coast Pilot and checked off the procedure for gaining access to the canal. We were to watch for a green light, a purple light, and then a reappearance of the green light. The directions, for the most part, were clear and concise, but there was one poser. On the appearance of the purple light, we were to proceed to Hog Island and "tie up to a *Dolphin*." It could not have been a misprint as it was repeated too often and I pictured, with pleasurable excitement, a whole school of "Pelorus Jacks" trained to keep us in line while waiting for the draw to open.

After hours of sweeping the horizon with our binoculars, we suddenly turned a sort of corner and found ourselves at the drawbridge without having encountered signals, island or dolphin. We quickly dropped our sails and I was just drawing a deep breath preparatory to hailing the bridge, when a man, in an official looking hat, dashed out on a nearby dock and waved at us menacingly. Positive that we were about to be apprehended for jaywalking, I was making ready to assume the Bewildered Two Defenseless Women attitude, when he directed us, through a megaphone not to tie up but to keep circling until the draw opened. My disappointment at discovering that dolphin is just another word for cluster of piles, was somewhat moderated by satisfaction over the success of our apparently unlawful entry. (We discovered, too late to be of use to us, that we had not taken the Hog Island route at all, but a new route set forth on chart 251.)

SUCH an aimless, lackadaisical cruise as this never before was carried out. Anything or nothing would cause a landing. At New London, it was to telephone the ones at home to assure them that we had never been in any danger in the squall that had hit us off the Thimbles. Though, to be sure, since the squall was purely local, they never supposed we had! At Monhegan, we paused to visit the artists that throng this island atelier. One of us longed for cod, so we stood in toward Rockland and took on board, from a generous fisherman, enough bait to glut all the cod, haddock and pollack in the Thoroughfare. Another day, we wanted to gather berries and put in to Benner Island; we stayed, instead, to watch a family of seals who, as appreciative of an audience as the seals at the zoo, disported themselves until it grew too dark for them to be sure that we were still watching.

We had only one reason for landing at Cutler. A fog held us there, chafing with impatience, just 32 nautical miles from the skipper's own front door. But, on the second day, despite the head shakings and the dire prognostications of the keeper of the light, and of a little gnome of a fisherman in hip boots and a walrus moustache, we steered our way by compass and the sound of the surf, to Eastport. An hour later a serving tide floated us into Lewys Cove where we beached our boat, and tied her to a gnarled old tree that seemed to lean outward from the bank for that express purpose.

No whaler crew ever received more royal homecoming than "them cruisin' women." The choicest viands that salt water farm could produce, the softest beds, were put at our disposal. We tarried until the fog lifted, and then, one evening in late July, just before sunset, *Scud* sailed off across Quoddy Bay; and, as the sun went down, passed through Little Letite, out into the Bay of Fundy, bound for St. John.

WE SAILED into that historic port at high tide, which was fortunate, since even we intrepid mariners could never have negotiated a 40-foot climb to the city wharf. We put in alongside a towboat and will ever remember the crew of the *Foremost 43*. It was the captain who, after treating us to high tea (lamb stew, beef steak, corn on the cob, potatoes, turnip, cake, pie and rice pudding), suggested that we might find it more convenient to change into shore dress vertically in his cabin, rather than horizontally in our own. And this same amiable man, after telephoning his home and receiving permission from his wife, acted as our pilot on trip by outboard, across the phenomenal reversing falls and up the palisaded river.

But our second run to Lewys Cove was not as easy or as pleasant as our first. When we left St. John, there was much moisture in the air and far

GIVE THESE JUDGES YOUR IDEAS FOR THE "Cruiser of Tomorrow"

ARTHUR MIDDLETON
Former Chief Commander, U. S. Power Squadrons; one of America's foremost yachting enthusiasts.

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CHAS. F. CHAPMAN
Editor of Motor Boating; author of "Piloting, Seamanship and small Boat Handling." One of the original organizers of the U. S. Power Squadrons.

YOUR IDEA MAY WIN A $500 WAR BOND!

★ The five outstanding authorities listed above are the men who will pick the winners from the hundreds of entries pouring in to "Cruiser of Tomorrow" headquarters. Here's a jury both sympathetic and understanding, and with a combined experience that fits it to pass judgment on anything concerning cruisers and cruising.

If you haven't submitted your idea or ideas for the "Cruiser of Tomorrow" Contest, do so now! You don't have to design a complete cruiser. A single idea for a simple improvement may be a prize winner. Practical suggestions for useful things that most yachtsmen want in a cruiser are the ideas we're after. First prize is a $500 War Bond; Second, $300; Third, $200—and 25 Honorable Mention prizes of a $25 War Bond each. Contest Rules are simple. Mail the coupon below for complete information and entry blank.

The Richardson plant is of course engaged 100 percent in the building of fighting craft, but when Victory comes our greatly expanded facilities and enriched experience will be turned to the "Cruiser of Tomorrow." You can help us with the planning now, while we're gaining new skill and efficiency under pressure of war production. Address your coupon to Richardson "Cruiser of Tomorrow" Contest, 296 Delaware Ave., Buffalo, N.Y.

CONTEST OPEN TO ALL!*
Amateur and Professional Alike!

1st PRIZE $500 WAR BOND
2nd Prize $300 War Bond
3rd Prize $100 War Bond

In case of a tie, duplicate prizes will be awarded

25 Honorable Mention prizes of a $25 War Bond, for the next best 25 ideas.

CLOSES MIDNIGHT JUNE 30th, 1943.

* Except Richardson's employees and adv. agency.

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CRUISERS for Peace time
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Richardson "Cruiser of Tomorrow" Contest
296 Delaware Ave., Buffalo, N. Y.
Please send Contest Entry Blank.

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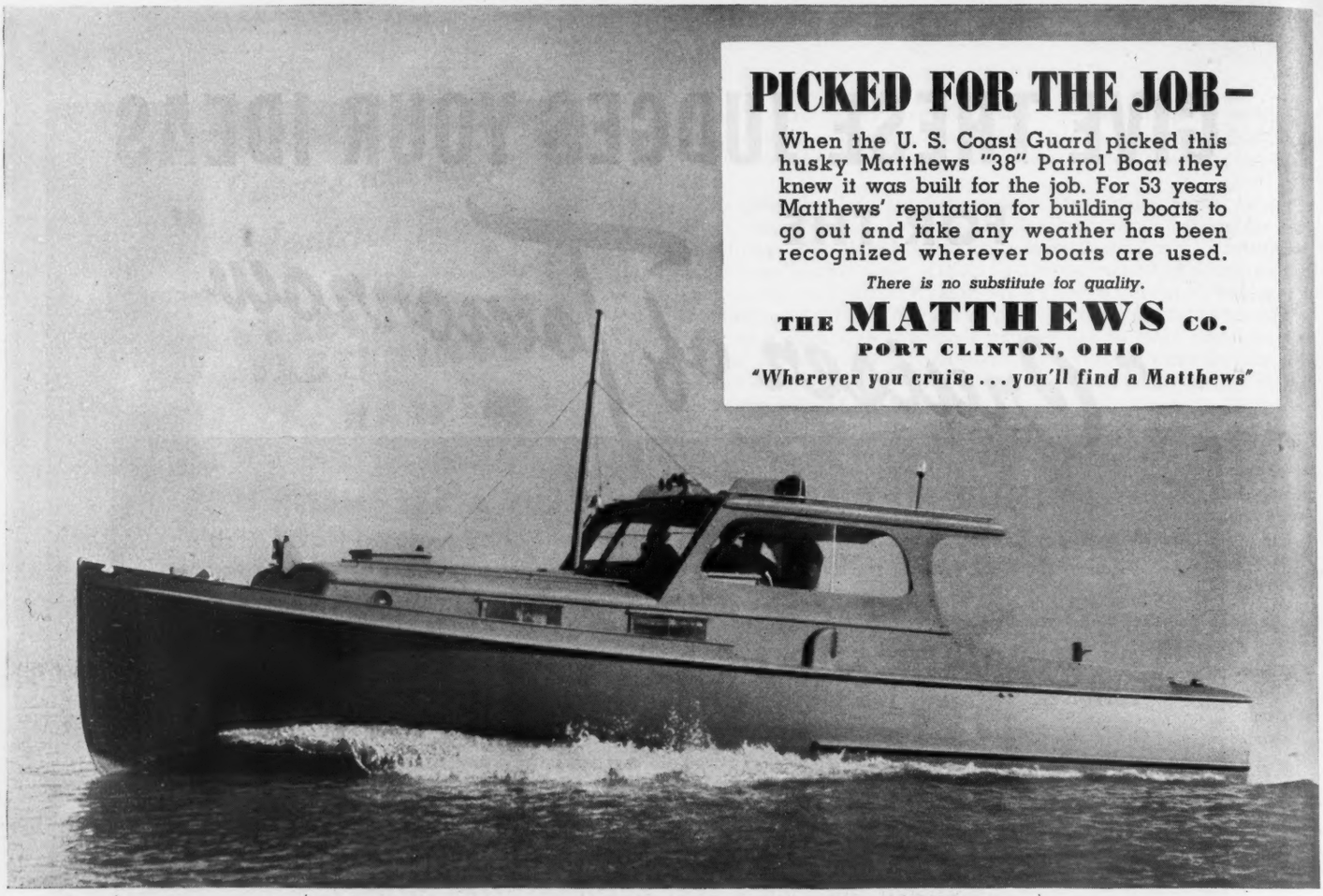

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PORT CLINTON, OHIO

"Wherever you cruise... you'll find a Matthews"

too much overcast for our liking. We decided to scud for home as fast as we could make it, since the coast from St. John to Quoddy affords no secure shelter in any sort of weather. It took both of us to handle the boat that first day and night; and, a few hours before dawn, we made our cautious way into a shallow bight, under the fishnets strung across the entrance, to snatch a few hours sleep. Later, we were awakened by the sound of male voices.

"What," said one, "in God's name, is *that?*"

I peered through the drizzle outside the porthole over my head. The voice belonged to one of two fishermen in a dory alongside.

"Hell," said the other, "We'll be readin' in the paper how some more fool yachtsmen have gone and drowned."

When, after donning oilskins, we appeared before them, and queried sweetly if they would move their nets and let us through, their consternation at finding their yachtsmen women was indeed ludicrous.

But our amusement changed to anxiety as the rain, wind and sea increased. It took us two days and another sleepless night of alternate sailing and using the outboard to arrive at Little Letite. Since the wind was fair, and our fuel supply low, we tried to make that mill race passage under sail. But, just as we came abreast the lighthouse, the wind abruptly shifted, and the keeper, who had probably had us under observation, ran to the shore, flapping a great red tablecloth to warn us off the rocks toward which we were being borne. However, by now, we had learned to drop our canvas and shift to motor almost simultaneously. Had the outboard balked on the first spin, that fisherman would indeed have been a prophet. We made the passage only just in time, as our gasoline gave out as we emerged on the other side. So we finished our passage to Lewys Cove under double reef mainsail.

After a long period of sleeping, and lolling in the shade of the lovely old trees on the skipper's home farm, we emptied our little sloop, scraped off the barnacles and, after loading her onto a stone boat, dragged her (with some help from the farm horse) up over the shore field and into the woodshed for a well earned winter's rest. And then, the "cruisin' women," preceded by a brief paragraph in the papers, made their way, by train, back to New York.

Was Dana ever read on that memorable cruise? Never; not a word. There is a rumor that he never came aboard, and a faint suspicion that "Two Years Before The Mast" was nothing more than a pretense, a kind of delightful lure, to be accepted as a symbol of migration.

ALONG THE ROAD TO RIO

(Continued from page 33)

By the time the yards have been squared a bit and the braces recoiled my hour at the wheel is more than over. I join the others as they return to their shelter up forward. As we cross the well deck, a playful sea, a little bigger than the others, sweeps out of the night, clears the rail and surges down on us. A leap into the rigging saves a ducking but two of the men are too slow, the water washing them across the deck head over heels until they bring up, bruised, against stanchions and bollards.

Sitting around with nothing to do, I get cold and stiff. Some try dozing in the lee of the weather rail, lying on the hard deck, a block for a pillow, but I find it too uncomfortable and wet. One or two are smoking, the red glow from the cigarettes gleaming like cat's eyes in the dark. We do not talk much; it takes too much effort, and then there is nothing to talk about. I sit in a semi-trance and wait.

Four bells from aft at the wheel and then from the forecastle head rouse me to go on lookout. As I mount the ladder to the upper deck the relieved man gives me a nod, glad to get down from the exposed position. We are going faster all the time, the wind increasing steadily. Stinging spray flies across the bows and in a short time my oilskins are running with water. I cannot see far ahead, only the mountainous waves racing towards us. The steamer astern has been rapidly overhauling us; her red and green side lights are now visible and even a few white lights along her hull.

As MY hour on lookout slowly creeps by there is a faint tinge of gray in the east. Objects about me become distinguishable: anchors, the capstan, the bowsprit and straining jibs, the lead of the sheets. I look back along the deck of the bark, past the lifeboats on skids to the poop and the distant helmsman. I can just see the mate standing at the rail as he watches the approaching steamer which is only a mile or so distant. She is a big brute, undoubtedly one of the Rio de Janeiro-United Kingdom liners. The seas make little difference to her as she plows along in a wash of foam. From one of her two funnels a thin wisp of oily smoke trails aft to mingle with the early morning. I think what a sight we must make to her officers on the bridge, an old-fashioned sailing ship, one of the last, bowling along before the rising gale, canvas stiff as steel.

At six bells I go aft to the poop to report to the mate. He tells me to go aloft to loose the main royal; we're going to give the liner a race. I swing

HASKELITE MARINE PLYWOOD

War Proved at GUADALCANAL

● Haskelite Marine Plywood is specified for its *light-weight* for greater speeds and greater capacity—*strength* to take the heavy pounding of sea or surf—and above all *endurance* under war conditions in every ocean.

Widespread use by all the armed forces is convincing evidence of the strength and weight-reducing qualities of Haskelite. It has been proved invaluable in the air and on the sea . . . offers unusual advantages in mass production programs . . . serves the Navy for aircraft, PT boats, landing barges, assault boats, mine sweepers and sub chasers.

***Marine* PLYWOOD**

The construction material of the famous Navy Torpedo Boats. Rigid, light-weight. For every marine use. Wherever rugged plywood is needed to stand up under wear and hard use.

PLYMETL

Metal-faced plywood panels of great rigidity and strength per pound of weight. Easy to fabricate; require less framing; provide a flat, non-wavy surface. In bus, truck and train construction Plymetl saves pounds, adds payload space.

PLYMOLD

Haskelite Plywood in a new structural form. Can be molded in compound curvatures; sections engineered to predetermined variations in thickness in the same panel; unusually large size panels; suited to mass production.

HASKELITE MANUFACTURING CORPORATION

Grand Rapids, Michigan

CHICAGO, ILLINOIS • DETROIT, MICHIGAN • NEW YORK, N. Y.

OFFICIAL U. S. C. G. PHOTO

. . . WITH OUR
MARINE WINDOW AND STEERING EQUIPMENT
ESPECIALLY DESIGNED FOR U.S.C.G. CUTTERS

American ship builders recognized the quality of Durkee Marine Products during the first World War. That quality has won for us the acceptance in the marine industry that permits us to do our part in the present American war program.

Today our products slide down the ways aboard the highly efficient U.S.C.G. Cutters... aboard other ships of the Navy; aboard Army ships and Maritime cargo vessels.

Tomorrow you'll find those products aboard ships of a merchant marine America never dreamed of; aboard a multitude of protective U. S. Naval craft all over the world; aboard the amazing pleasure craft that are on designers "boards" even now.

Our engineering staff is prepared to design a wide range of marine products. Our manufacturing plant is prepared to produce them . . . promptly.

AIRPORTS • DECK LIGHTS • PORTLIGHTS
MARINE WINDOWS • NAVIGATION LIGHTS
SIGNAL LIGHTS • MECHANICAL TELEGRAPHS
STEERERS

Marine Hardware by

DURKEE MARINE PRODUCTS CORP.
GRASMERE, STATEN ISLAND, N. Y.

The watch out on the cro'jick yard furling sail.
"One hand for yourself and one for the owners"

into the weather rigging, pull my belt tight, and start the long trek up. The masts are 170 feet from deck to truck, equal in height to a twelve-story building, so it is no easy jaunt in the best of weather. Now the wind tugs at me, catching in my oilskins, blowing the jacket over my head. The heavy sea boots, always a nuisance, weigh like lead as I mount each ratline. As a rule I would be bored and annoyed at having to go aloft like this but now it is different; the steamer gives it a thrill. We are almost neck and neck, getting closer all the time. She is apparently going to cross our bows to head in for the coast.

I crawl out along the yard's footropes, loosing the gaskets that bind the sail. The great folds of canvas drop, billow out in the gale. Far below I see the ship, seemingly small as a model, plunging into the rearing swells. At the masthead I swing in a huge arc with the pitching of the ship, at times far out over the water. If I should slip and fall I would land yards away from the ship — not that it would matter much where I landed after falling from such a height. At the foreroyal ahead of me one of my shipmates is loosing that sail; the mizzen is likewise being let go. We are going to show the steamer some real sail carrying.

When all is ready aloft the boys on deck take the halliards to the nearest capstan, take a few turns, ship the capstan bars and start trudging around and around. Slowly the yard comes up, squeaking and wailing. I clear the lines, overhaul buntlines, and see that everything is free. The sail is set, the ship feels the added impulse, heeling more. First making up the dangling gaskets I return to deck just at eight bells, the end of the watch.

In the forecastle we argue about the race. Some think that even holding our own with the liner is out of the question as she is doing a good fifteen knots; others declare that if we get the breeze we'll go right ahead. But, as we'll be back on deck in four hours, we climb into our bunks. At 6:30, when the other watch comes below for coffee, we hear that the steamer has gained about a length but not enough to cross our bows. At 7:30, when we are called to dress and have breakfast before going on watch, we can see the ship through the port. She is just a short way ahead, not far off.

At eight bells all hands are called to square the yards more and to take a pull on all the sheets. The day has broken clear, with blue sky and green, foam-capped sea. The breeze is really heavy now, just what we want. Two men fight the wheel to hold her to the course. There is no doubt now that we are cutting down the distance. Inch by inch, we creep up. Our bowsprit passes the liner's stern, advancing with each minute. A squall sweeps across the sunlit sea, striking us and burying the lee rail under swishing, sparkling spume. We do sixteen knots, seventeen, almost eighteen. Once more, both ships are beam to beam; then we forge ahead.

On the liner the passengers are up, lining the rails. They have stewards to look after them, comfortable quarters, living rooms, dining rooms, smoking rooms, large airy cabins and, probably, a swimming pool and theater. Their meals are the best they could ask for, fresh and varied. And what have we? The forecastle, with bunks two high lining the sides and the mess table down the middle of the compartment, is our sole living quarters. Our meals consist of "salt horse" and so-called gravy, a few potatoes, and sometimes porridge. We carry no refrigerating plant to keep things fresh on our 90-day voyage. For all that, I would not exchange my place before the mast for the bridal suite aboard the liner. I want the sea, the sea in sail.

We are now leaving the steamer astern; we have passed her. Three white puffs appear at the top of her forward funnel and she gives us three long blasts on her whistle to acknowledge our victory. The British flag flutters aloft and is dipped to us. We return by dipping the blue and white flag of Finland. A half-mile astern of us her bows turn as she crosses our wake. We have won the race.

When we go below at one, she is a mere smudge on the distant horizon. A sailing ship has had her day.

Official U. S. Coast Guard Photograp

BURGER BOATS

GUARD AMERICAN WATERWAYS

Burger-built for pleasure, these boats—and others like them—have "joined up" and are now helping defend America's harbors, rivers, lakes, and coastal waters against enemy action.

Your war bonds are helping send Burger-built sub-chasers and mine sweepers on their way to active service—and helping you save for your new Burger yacht.

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BURGER BOAT CO. ★ MANITOWOC ★ WIS.

A Ludership Now Manned by the U.S. Coast Guard

Luders Marine Construction Co., Stamford, Conn.

THE COAST GUARD CARRIES ON

(Continued from page 38)

Fortunately for me, I got into the Coast Guard Reserve at an early date and was assigned to sea duty. Up to that time I had spent all of my life as a civilian, but had extensive yachting experience and numerous voyages in ocean steamers to my credit. I had also put in many months of strenuous work as commander of a flotilla in the Coast Guard Auxiliary.

I discovered the dignity and formality of all personal relationships. In the Coast Guard (as in the Navy), everybody on the ship calls the commanding officer "Captain" — even though his rank may be only ensign or lieutenant (jg). To call him anything else (to his face) would be a serious breach of etiquette. The other officers whom in the business world he would call Charlie or Bob or Dick after they had been in the office a couple of weeks, he properly calls Mr. Brown, Mr. Smith or whatever the surname is — even though they may be twenty years his junior.

If any enlisted man wants to talk to the commanding officer, he is required to get permission to do so from the executive officer. Fortunately, in a small ship, the commanding officer does not have to eat his meals alone — as do the commanders of cutters and the larger ships of the Navy — but messes in the wardroom with the other officers. From this it can be seen that, even in a small ship, the commanding officer is to a considerable extent a man set apart and leads a rather lonely life.

There is an old saying in the Coast Guard and the Navy: "Take care of your men and they will take care of you". No officer can afford to be familiar with his men — least of all the skipper. But the men all have problems — serious personal problems at times, as well as problems having to do with the operation and efficiency of the ship. They like to believe the "Old Man" can help them and will help them and, if the "Old Man" is made of the right stuff he can and will. This involves a friendly interest in the men and much conversation, and it is not always easy to tread that thin line between friendliness and familiarity.

When a man reports to an officer that he has finished a task, or is about to undertake a certain job, the officer does not say "All right" or "O.K." or "Hop to it!", nor any of the slang phrases so familiar in civilian life. The officer replies "Very well" — and nothing else, unless further discussion is necessary. There is a good reason for this. On the bridge, the steersman listens for the orders "Right rudder" or "Left rudder." The words "All right" might confuse him. Slang would be frivolous and smack of familiarity — and there is no room for either frivolity or familiarity in the relationship between officers and men.

There are certain picturesque usages, reminiscent of old times. Shortly before noon, the quartermaster of the watch comes to the captain and says "Twelve o'clock approaches, sir." There is just one correct reply to this: "Very well, make it so." At the outset, one is tempted to wonder how the quartermaster could make it anything else!

The system of punishments is another thing that has the officer from civilian life stumped for a while when he enters the service. You can't fire an incompetent or erring seaman, as you would an employee in your own business. The man is in the service for the term of his enlistment, or for the duration of the war — unless he commits a crime of such enormity that he gets a dishonorable discharge, which deprives him of his citizenship. As a result, there has been set up a complicated judicial system, with punishments consisting of deprivation of shore liberty, extra hours of work, confinement in the "brig" and, for major crimes and offenses against the wartime code, long penitentiary sentences and the death penalty. The commanding officer of a ship is both judge and jury for minor offenses not serious enough to warrant a court martial and the problem of "awarding" punishment so as to maintain order and discipline without being so severe as to create antagonisms that impair efficiency is not always an easy one.

Needless to say, both the Coast Guard and the Auxiliary have expanded enormously since December, 1941. The Auxiliary, which numbered a few hundred men and boats at the outbreak of war, now counts its membership in thousands. The growth of the Coast Guard itself has been so rapid that, before the close of volunteer enlistments, as many men were being shipped in one month as were enrolled in the whole service less than two years earlier.

In landing troops on Guadalcanal, North Africa and other shores in the fighting zones, the well known skill of the Coast Guard in handling small boats has stood up to the best traditions of the Service. With the experience of more than a century and a half in landing seamen from wrecked ships on beaches in raging storms, handling lifeboats in the worst kind of seas and fog, exploring waters and harbors of uncharted islands and shores, these men of the Coast Guard have developed a skill and courage that makes them second to none when it comes to handling landing barges loaded with troops, tanks and supplies.

Recently, the Coast Guard's Bureau of Merchant Marine Inspection issued a wartime safety book, containing the results of its investigations into

What's behind the maneuver called "getting the hell out of there"?

ONE OF THE PRINCIPAL tactics of the Navy's famed PT boats is this:

(a) get as close as possible to your objective without being discovered, (b) roar in and let go with the "tin fish", (c) then execute the maneuver known to PT boat men as "getting the hell out of there."

What makes this "hit and run" maneuver successful is *speed*—bewildering speed—at the command of skilled and courageous men.

And what makes possible the incredible speed of the PT boat is its bank of Packard marine engines, marvels of power and precision.

Every daring exploit of the PT boats—every bulletin about another blasted enemy ship—is music to the ears of Packard men and women. For, at Packard, there is a great marine engine tradition, stemming from the Packard engines that set world speedboat records year after year.

Today, precision craftsmanship at Packard is meeting its toughest test, and making good. We are building not only Packard marine engines, but Rolls-Royce aircraft engines—and turning them out on a mass production basis.

That kind of craftsmanship points to better, finer post-war Packard products. But that's talking future. Right now, we're concentrating on building better fighting engines, and more of them.

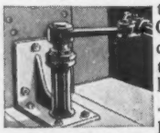
ASK THE MAN WHO OWNS ONE

Overheard on many a dock!

And may the gods of War be good to lucky Owens owners this summer so they'll say it again: "It's a grand boat. Small enough for one-man handling, large enough to entertain the gang, roomy enough to sleep the whole family and more, stout enough to take it in any kind of weather—she's a honey." That about sums up the ideal boat for the average man, don't you think?

Room All 'Round. That's a pretty small photo—but it shows the really ample room between the uppers and lowers—all better than 6 feet long. Room is one thing an Owens has a lot of, because of the way every little inch of space is used cleverly. Isn't that important? Anybody who packs more utility into a 30-ft. hull will have to get up a long time before sun-up. I guess the "O" in Owens stands for "oversize." It's a great boat.

Nice Steering, That! If you want to get down on your hands and knees and take a look, right there at the stern is



the famous Owens rudder-post fitting. See the little sketch . . . that is positive rod steering. Backing, turning, slow, full speed ahead in a heavy sea—Owens handles perfectly. Notice how the heavy bronze knee of this rudder fitting bolts to both transom and keelson. Double duty, eh?

Not Now, But Soon. No, you can't buy an Owens now—the big Owens plant is turning out landing barges and rescue boats. But come Victory—Owens dealers will show you the finest cruiser you have ever dreamed of. Watch for it!

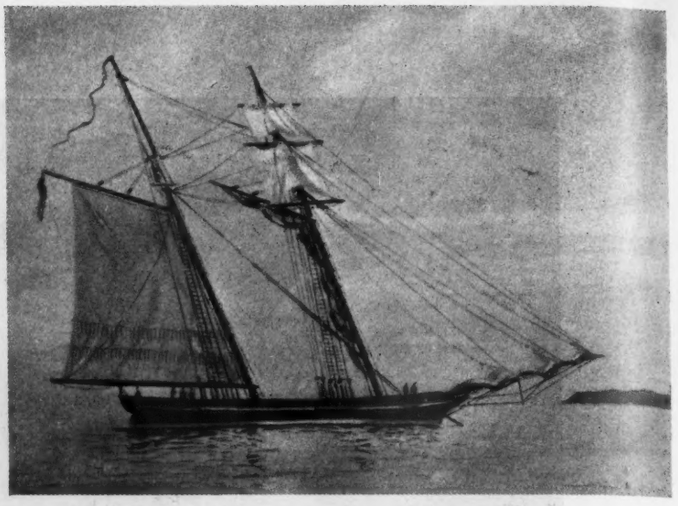
OWENS 30 ft.

The Ideal Cruiser

= The Owens Yacht Company, Baltimore, Md. =

Speed Victory...

BUY U.S. WAR BONDS AND STAMPS



The "Massachusetts" was a Revenue Cutter from 1791 to 1796

the sinking of many merchant ships, the circumstances of the survivors' rescue, the hardships they underwent in leaving the sinking ship and in the lifeboats and rafts, and their recommendations. The book is the result of interviews with survivors of torpedoed craft from all of the United Nations. As a result of the recommendations, many changes and improvements have been made in safety appliances and in the equipment of life boats.

Of course, the latest and most publicized innovation in the Coast Guard's repertoire is the establishment of a woman's auxiliary — the SPARS. This name is derived from the initials of the Coast Guard's motto and its translation: Semper Paratus — Always Ready. The SPARS are the newest of the women's auxiliary forces, following the WAACS and the WAVES. It is too early yet to estimate the potential extent of their activities but there is no question but what much of the work now done in shore stations and bases by husky young men who should be at sea can be done fully as efficiently by properly trained women.

Perhaps the one thing that most impresses a man coming into the Coast Guard is the high caliber of the officers and men who have devoted their lives to the service. There is no better seagoing training anywhere in the world than is given the cadets at the Coast Guard Academy in New London, Connecticut. The officers who have graduated from it, as well as the enlisted men who have served long in the ranks, have a genuine esprit de corps and devotion to the service that would do credit to any military organization. The Coast Guard is famous for its seamanship and its heroic rescues, but these would not be possible were it not for the innate high courage and outstanding character of its personnel.

Thus, the Coast Guard carries on. *Always Ready*, as its motto implies, to enforce our maritime laws in time of peace and taking an active part in our combatant forces when the nation is at war.

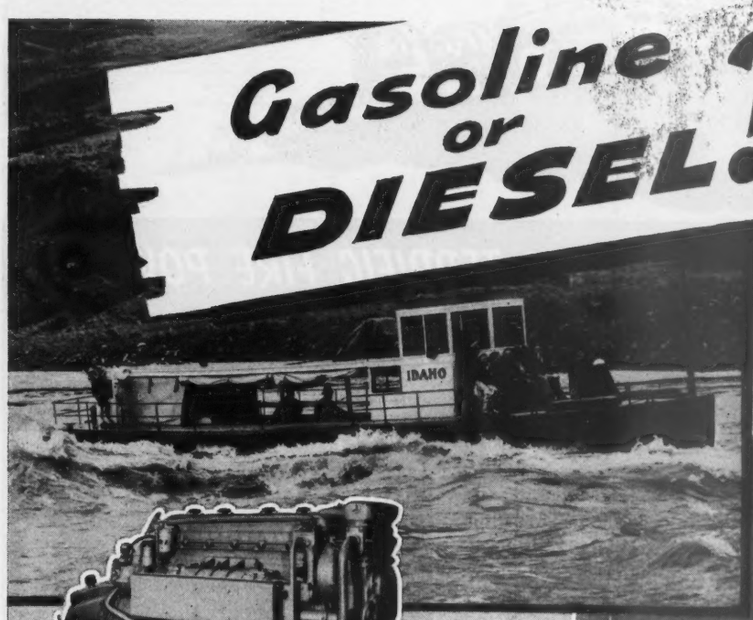
UNDER THE LEE OF THE LONGBOAT

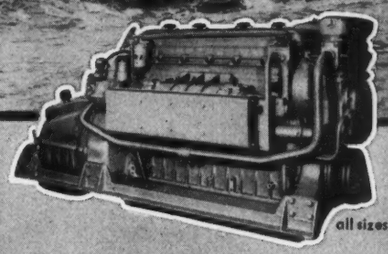
(Continued from page 41)

Here's a story of something that happened in the last war that couldn't happen in this (Ha ha!). Friend of mine on duty in Boston received orders to proceed to Base Two, *via* New York. Try as he would, he couldn't find out where Base Two was. It was most secret. In New York, his orders were indorsed to Philadelphia, and in the Navy Yard there he learned no more than he had learned in Boston and New York. Shush shush; the location of Base Two was a military secret. From Philly, he was routed to Norfolk where the mystery thickened. At midnight, he would board a vessel which would transport him to Base Two. In the meantime, not a word of enlightenment. Having time to kill before midnight, my friend left the Personnel Office, left the Navy Yard and stopped indecisively on a city sidewalk. "Base Two?" shouted an enterprising taxi driver. "Take you there for two bucks." "Do you know where it is?" asked my bewildered friend. "Sure," snorted the taxi driver. "Everybody around here knows it's Yorktown." As I say, nothing like that could happen in this war.

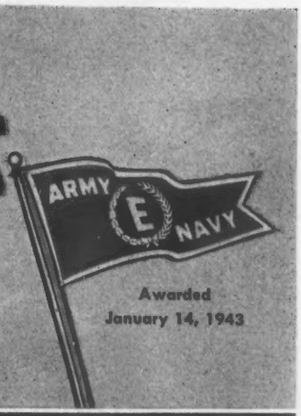
What follows may be blamed on a party of Waves that were being personally conducted over a mine sweeper on a tour of inspection. The quartermaster of another sweeper remarked to his skipper: "That YMS is making pretty heavy weather of it, sir." "What do you mean, heavy weather?" demanded his skipper. "Well, sir," said the QM, "since I've been watching her, half a dozen waves have gone right over her, and there's a heavy one crashing the officers' wardroom door right now." . . . Ten days bread and water.

Gasoline or DIESEL?

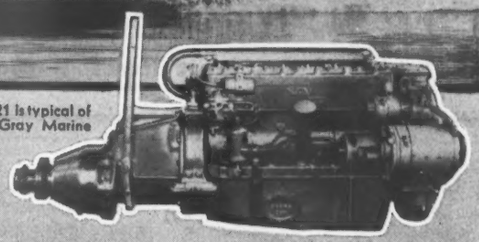




6-cyl. streamlined Gray Marine Diesel. Basic parts are interchangeable in all sizes, from 1 to 6 cylinders.



Awarded January 14, 1943



The Model SIX-121 is typical of all standardized Gray Marine Gasoline Engines. Note compactness, low height and accessibility of all parts.

An Answer to One Postwar Problem:

Gray is in the position to tell you that for certain boats and certain types of service, Diesel Power is distinctly better than any other type of power; also it is equally true that nothing has been found or is in sight that is as good for many types of boats as a modern gasoline engine of the correct type and size.

This kind of knowledge doesn't come over a period of months. Gray's sureness is based on thirty-seven years of marine experience. Add to this the current vast war-taught "know-how"; a highly specialized Gray engineering staff has turned its skill into powerful new war designs, packing another lifetime of experience into high productive months since December 7, 1941.

Out of this strength and wisdom will come new Gray engines for the new markets.

This maintenance and trouble-shooting handbook on gasoline marine engines has recently been compiled as a companion piece to Gray's "Diesel Operator's Handbook" published in 1942. Either booklet free on request.

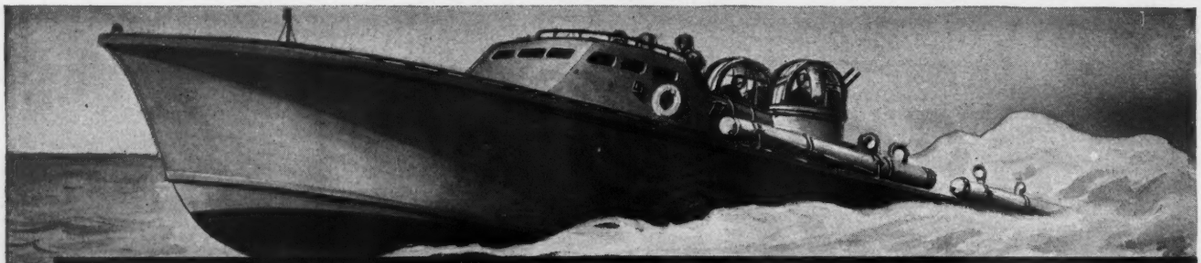
Students, Naval Operators, Amphibians, Boat Owners, Power Squadron Classes, write for complete list of Gray's practical instruction literature, gasoline and Diesel.

GRAY MARINE MOTORS
GASOLINE
DIESEL

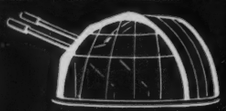
NEW

GASOLINE OPERATOR'S HANDBOOK

GRAY MARINE MOTOR COMPANY, DETROIT



THIS LITTLE FELLOW CARRIES TERRIFIC FIRE POWER—



Machine Guns

Depth Charges

Torpedoes

and — against the enemy within —

Kidde Carbon Dioxide Fire Extinguishers

FAMOUS for striking power, the scrappy little PT-Boat strikes swift and sure at fire, too. Many of these craft, as well as other types in the fast-growing auxiliary fleets, carry Kidde Extinguishing Systems. At the first hint of danger the Kidde nozzles lay down a barrage of snow-and-gas that wipes out fire quickly and completely.

If you are fortunate enough to enjoy Kidde protection on your private boat, be sure to keep the equipment in good working order. Let your nearest Kidde representative or boat builder help.

Kidde portable and built-in systems were formerly known by the trade name "LUX."

Walter Kidde & Company
Incorporated
515 West Street Bloomfield, N. J.

SPRINGTIME TUNE-UP

(Continued from page 43)

carburetors the table in Fig. 4 is given for handy reference. The dimensions are measured from the gasket surface or parting line of the float chamber cover to the bottom of the float at the center. The float needle valve should be in the seated position with the upper body of the carburetor held upside down as shown. For fuel pump pressures over 3 lbs. per sq. in., or where your carburetor is installed at an angle of over 10°, these dimensions do not apply. To adjust the float position, bend the arm of the float.

See that your choke valve opens completely. Also be sure the flame arrester is clean before attempting any adjustments.

Your engine and manifold should be thoroughly warm before making any further adjustments. The idle or low speed adjustment for mixture is simple. Turn the idle needle valve (9, Fig. 3) slowly to the right and left until you find the position giving the smoothest engine operation. In the Zenith carburetors, turning this screw to the right makes the mixture richer, and to the left, leaner.

The main jet adjustment should be made *with engine running under load*, never by racing at no load. Assuming you have an adjustable jet, I suggest you tie up your boat securely, then shift into forward speed. Next, open the throttle ½ to ¾ and proceed with main jet adjustment (2A, Fig. 3). Loosen the packing gland slightly, if necessary. Turn adjusting screw to right, which leans the mixture, until there is a noticeable drop in r.p.m. Next, back off the screw, which richens the mixture, until the r.p.m. again drops. The ideal adjustment is on the lean side where a slight drop in r.p.m. is barely noticeable. Finally, tighten the packing gland to hold the needle in this position, taking care that in doing so the setting is not altered. With this setting, your carburetor will probably deliver the best power mixture at wide open throttle since the power jet comes into action to supply more fuel when the throttle is wide open.

The advantage of carburetor adjustment on a boat is that the propeller acts as a built-in dynamometer, which you don't have on an automotive vehicle. I have seen so many people get into trouble by trying to make a main jet adjustment without any load on the engine that I want to stress again: *adjust it under load.*

Once properly adjusted, the carburetor should stay that way for a good many years, provided that you keep out sediment, water and gum. The modern carburetor is an exceptionally dependable mechanism and rarely gets out of order. Once your carburetor is properly adjusted, leave it alone.

Fuel Tank and Lines

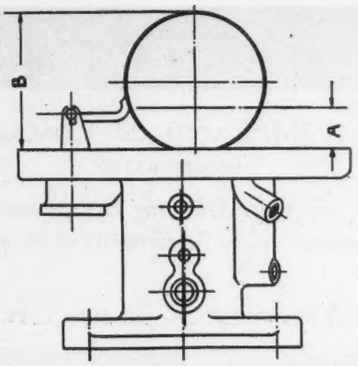
Now that your carburetor is nicely adjusted, keep it that way by preventing foreign material from collecting inside. If you have a galvanized tank, be sure it is installed with the outlet at the lowest point so that condensation water readily drains out into the fuel line, where it can be separated in a sediment bowl. Some prefer to extend the gas line up inside the tank but recent research proves this is bad because a small amount of condensation water may be trapped in the tank. Pure gasoline does not form white sediment in a galvanized tank nor will water alone. The combination of the two is responsible for the formation of this sediment, which is bound to clog carburetors sooner or later. Removal of water is simple with a gasoline sediment bowl in the line; clean it out frequently.

Of course, a gasoline shut-off valve is necessary between the sediment bowl and the tank. For safety's sake, shut off the gasoline valve at the end of each day. Filler caps and tank vents should be placed above deck, so that gasoline spillage or fumes, which are heavier than air, will flow overboard instead of down into the bilge. Drip pans under carburetors are urged by fire underwriters. Personally, I don't favor such a gadget because it is apt to give one a false sense of security. Until someone invents a drip pan of greater capacity than the fuel tanks, I wouldn't install them. Suppose you have a gravity fed system and the float or needle valve was leaking and you did not make it a practice to shut off the gas line. It wouldn't take long to fill up the drip pan and then overflow into the bilge. Maybe I'm peculiar in taking exception to the drip pan but common sense seems to tell me to have a good shut-off valve on the fuel line — and use it. Furthermore, if your carburetor is properly maintained, you shouldn't have a fuel leakage.

In my own cruising auxiliary, the fuel valve has an extension shaft coming up through the instrument panel. I always shut off the motor by turning off the gasoline supply and running the carburetor dry. I believe this is safer than a drip pan. I have an electrically driven suction blower installed for added safety.

Miscellaneous

It is well to note the condition of clutch and reverse gear. If slipping, in forward speed, set up adjusting nut, but not to the point where it grabs.



Carburetor Size	Carburetor Model	Fuel Level Dimensions A	Float Setting Dimensions B
1¼"	555	5/8"	2 1/8"
1½"	556	5/8"	2 1/8"
1¾"	557	5/8"	2 11/16"
2"	558	5/8"	2 11/16"

Courtesy Zenith Carburetors

Fig. 4. Fuel or float level adjustment of Zenith carburetors

The reverse gear band should be adjusted so that it will hold the drum in reverse position, but not to the point to cause dragging and overheating when in forward position.

Shaft alignment should be checked after your boat has had a chance to soak up for a week or two. To check this, break open the coupling flanges and, with feeler gauges, line up your motor so the faces of the flanges are exactly parallel. If you have an inside stuffing box, you might adjust this too, if necessary.

If you didn't change your crankcase oil (also reduction or reverse gear, if separately lubricated) at the end of last season, I suggest you do so now. If your engine has an oil filter, replace the cartridge whenever changing oil. Use a good quality marine engine oil of the viscosity recommended by your engine manufacturer. Don't overlook lubrication of water pump and engine accessories.

Here are a few ideas about preventing sludge formation. Don't run your engine jacket temperatures too cold; 140 to 180°F are limits recommended by most engine manufacturers. In salt water, you will have to stay closer to the lower limit to minimize deposits in the water jackets. Most cases of sludge in marine engines can be traced to subnormal jacket temperatures, causing condensation of combustion chamber gases in the crankcase. If you want to cut cylinder wear to a minimum, keep your engine up to temperature. In most engines, the wear at 100° F., jacket temperature, is about ten times greater than at 140 to 150° F.

Now that you have carefully and patiently checked over your engine please don't contract a case of "tinkeritis." If you have done a good job of tune-up at the start of the season, the chances are that you will not have to touch your engine, except for lubrication, again until next season rolls around.

GUADALCANAL FERRY

(Continued from page 30)

fuel. Sherman once said that an army travels on its stomach but, after my three months on the island, I am quite firmly convinced that the modern army travels on gasoline. When conditions got bad, we attempted to use stores of Japanese fuel which were captured, but any man who has operated a boat much knows that a marine and an automobile engine are much the same. When you have your carburetor and timing adjusted for a special kind of fuel, you can operate it on a lower grade of fuel for a while, but your performance is poor and before long you soon regret the day as your whole engine becomes "gummed up" and requires a major overhauling. In most cases when this happened, we would exchange the boat with some ship which had come in and take one of their boats in her place as our major overhaul facilities were extremely limited. We found that foxholes did not make good overhaul shops and usually a good portion of the day was necessarily spent close to our miniature dugouts.

All in all, the operation of boats at Guadalcanal would have broken the heart of a yachtsman bred with the idea of a shipshape boat, but shortly we began to marvel at the ability of the plywood hulls and their engines to "take it." In fact, I think the boats as a whole can, with full justification, use the Marine Corps motto, "Semper Fidelis," because they were always faithful and withstood abuses far greater than anybody believed was possible.

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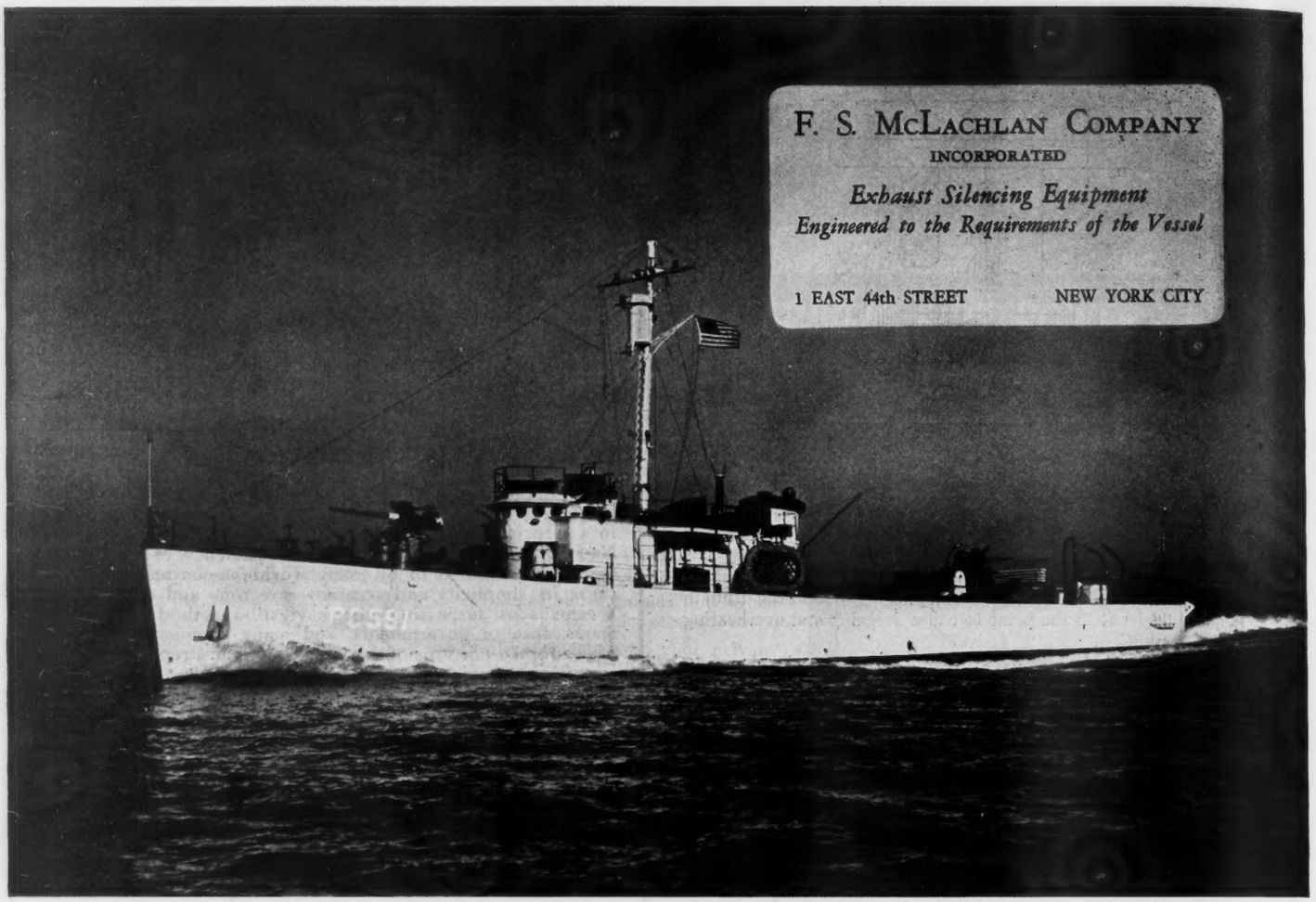


OPEN BOAT CRUISING

(Continued from page 36)

For carrying drinking water, I recommend ½-gallon glass jugs for which suitable racks may be built. Cutting a piece of old inner tube (if such there be) about 8″ long and fitting it over the jugs will help to protect them from breakage. Turning the upper and lower edges of the rubber back on itself for an inch offers additional protection.

On very small boats the question of an ice box is a difficult one. There are nursery ice boxes which may be purchased quite reasonably, or one may be built of plywood, zinc and Celotex, mineral wool, or other insulation. For short cruises dry ice, wrapped in several thicknesses of newspaper, will keep food cold if placed in a paper carton with the food. On boats of 18 or 20 feet over all, a built-in ice box is practical and would be well worth the trouble of building if any cruising, other than over night, is contemplated. In small boats of this type, there can be no objection to allowing the ice water to drain into the bilge as the latter is usually well ventilated and bailed frequently.

Dishes had best be of enameled ware, although heavy crockery will do. A cup, a bowl and a plate for each member of the crew should suffice.

Be sure to include among your supplies a good first aid kit, sun tan oil, carron oil and a mosquito repellent. I have found that milk of magnesia applied to severe sunburn relieves the pain almost at once.

Apropos of mosquitoes, it would be wise to take along enough white cotton mosquito netting to close all the openings in your tent. I say *white* cotton because I once had a sad experience with a green netting. It rained, the color ran and dyed the white paint so that only repainting served to efface it.

A couple of good flashlights, with extra batteries and bulbs, are a good idea. For ordinary lighting in a small boat, I prefer an old fashioned barn lantern. This means carrying kerosene. If you plan any night sailing, you will need proper running lights and, unless you are on a small body of water you will also need a suitable riding light to hang in the rigging.

If you plan to cook on the beach you may want to carry a hatchet for splitting fire wood. If you want the luxury of home baked biscuits, or baked potatoes, you may have it by taking along a folding "reflector baker" which, when put in front of a campfire, will do all the baking or roasting you could do at home. This gadget sells for about $5.00, and is well worth it.

The new dried foods are ideal for campers and cruising men, being compact, spoilproof and tasty. Bisquik tea biscuits or Duff's gingerbread, hot out of the oven, hit the spot after a day on the water, and dried mashed potatoes are delicious, as are also dried vegetable soups.

There is, in my opinion, no satisfactory answer to the toilet question in a small boat. Privacy is absolutely out of the question so that the best that can be hoped for is some sort of screen arrangement, probably a canvas dodger. A galvanized bucket, although favored by some, is too uncomfortable to suit me, so I rigged, on a boat that I once owned, an old fashioned one-holer, or commode, which consisted of a wooden seat with a hinged cover and, below, an agate kettle of ample dimensions. There is a camp toilet that looks good but with which I have had no personal experience. It has a wooden seat, metal legs which fold, and disposable paper bags. It weighs 7 pounds, folds into a small space and costs about $6.50.

If you are fond of fishing, there is no need to remind you to take along your tackle, but even if you are not a fisherman I advise you to take some hooks and line — just in case. After an early morning swim, a pan of freshly caught fish frying for breakfast smells mighty sweet.

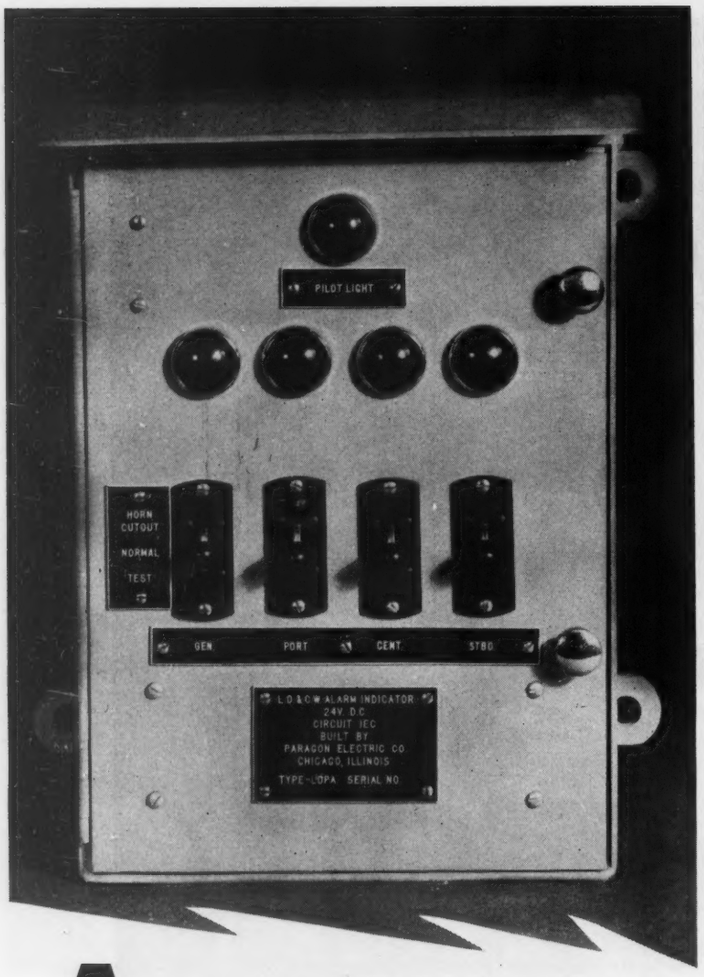
A list of some of the other gear that you may wish to take along follows: Camera, film, .22 cal. rifle and ammunition, pocket knife, oil stone, pencils, paper, toilet paper, towels, wash cloths, soap (hard water), salt, pepper, granulated sugar, coffee, tea, evaporated milk, butter, bread, cereal, cream, chocolate, fruit, cheese, jam, peanut butter, potted tongue or ham, canned soups, beans, corned beef hash, and apple sauce, eggs, bacon. Sun glasses, metal mirror, toilet kit, extra wool socks. Beer.

Non-perishable food and canned goods had best be stowed in the bilge, if it is dry. Those which would be affected by moisture will naturally be carried elsewhere. Beware of washing labels off cans in a wet bilge.

If the suggestions contained in this article appeal to you as a pleasant way to spend your vacation this summer, and you have never tried small boat cruising before, I suggest that you go off for a week-end and try it out before going for an extended voyage.

In the years to come, I fully expect to see many more people cruising in small boats for, once experienced, its joys will be found to far outweigh its hardships, and the sport is bound to gain many new adherents under conditions existing in the world today. It has been my experience that the size of the boat has no relationship whatever to the enjoyment to be had from sailing her. If anything, I should say that the advantage was really with the little fellow.

Remember
WHEELER



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AMERICA'S "FIRST" FLEET

(Continued from page 23)

remained afloat until a tug arrived and towed her to an east coast port for repairs."

Next in the size are the 250′ *Lake* Class cutters, which were transferred to the British Navy in June, 1941. At this writing, three of them have been lost in action but the remaining number are serving under the White Ensign with distinction.

To take the place of the 250's, the new building program includes the construction of one 290′ tender class cutter, the *Storis*, and thirteen 255′ cutters of the PG class which in all probability will be modernized counterparts of the original "Lakes." These are the *Androscoggin*, *Chautauqua*, *Huron*, *Iroquois*, *Klamath*, *Mendota*, *Minnetonka*, *Okeechobee*, *Otsego*, *Owasco*, *Wachusett*, *Winnebago* and *Winona*.

The 240′ cutters, also rated as PGs, are but four in number but rich in years of distinguished service. They are the *Haida*, *Modoc*, *Mojave* and *Tampa*. Turbo-electrics of 2600 horse power, they are rated at 15½ knots and have a cruising range of nearly 6000 miles. Then there are the steam-driven 165-footers: *Algonquin*, *Comanche*, *Escanaba*, *Mohawk*, *Onondaga* and *Tahoma*. Originally designed as icebreakers, they are now heavily armed and are ideally suited for varied types of operations. Their displacement is 1000 tons, they develop 1500 horse power and do over 12 knots. Cruising radius is about 4000 miles. In addition to the above vessels, there is also a class of 17 PCs which are rated as cutters.

Perhaps the most interesting additions to the Coast Guard's fleet of miscellaneous cutters are the "whale killers." Those familiar with these rugged little vessels, which in days before the war did the actual whale killing and towed the "kill" back to the whale factory ships, will vouch for their toughness. It's a safe bet that they will be just as tough on undersea raiders. They are rated as YPs, and range in size from 103′ to 142′ over all.

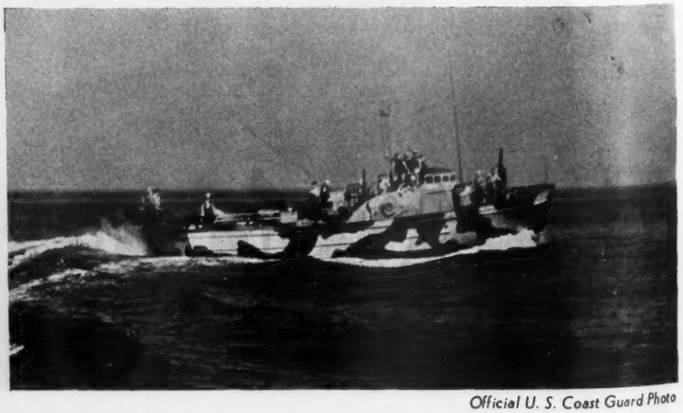
While on the subject of fish, it must be noted that the Coast Guard has also recruited two other famous types of commercial fishermen. Some time ago they took over eleven seagoing trawlers, of between 100′ and 150′ in length and displacing something under 500 tons, for miscellaneous coastal duties. Classed as PGs, they have names such as *Aivik*, *Aklak* and *Nogak*. And, to the amazement of all concerned, they also drafted a substantial part of the famous old menhaden fisherman fleet. These venerable vessels are a familiar sight almost anywhere along the Atlantic Coast, and it is anticipated that they will be an increasingly unwelcome sight to any unwary German visitors.

The Coast Guard's modest statement that the exigencies of war have necessitated the addition of various types of miscellaneous cutters actually covers a substantial increase in fleet strength. There are some thirty-five additional vessels of 1000 tons and under, and ranging from 104′ to 316′ over all.

The 125′ cutters were built in 1926 and 1927 for the specific purpose of chasing rum runners; they are now assigned to more important game. Of 23′ beam, 9′ draft and 220 tons displacement, their speeds range from 10 to 14 knots. Diesel-powered, their cruising range is unusually large. Thirty-two in number, they possess distinguished names such as *Antietam*, *Harriet Lane* and *Pulaski*.

\+ + +

Early in March the following dispatch was tucked away in an obscure corner of the New York *Times*, and it may be assumed that readers gave it scant attention. It read: "Hopeful of setting a Mississippi River precedent that has been attempted since the days of Mark Twain, the Coast Guard sets out tomorrow to smash all ice in the river between St. Louis and St. Paul. The Coast Guard expects to succeed because of a new Amsterdam



Official U. S. Coast Guard Photo

A camouflaged 83′ Coast Guard Cutter

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THERE'S a second star on Exide's Army-Navy pennant. It symbolizes 6 more months of exacting service to our Armed Forces . . . service which meant delivering vital batteries on schedule, and often, ahead of schedule.

In a letter to Exide, Admiral C. C. Bloch, Chairman of the Navy Board for Production Awards, says:

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Thank you, Admiral Bloch, and we want you to know that your words inspire the men and women at Exide to even greater effort in the future.

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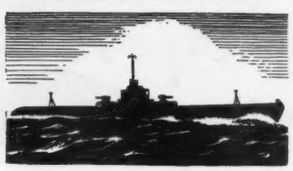

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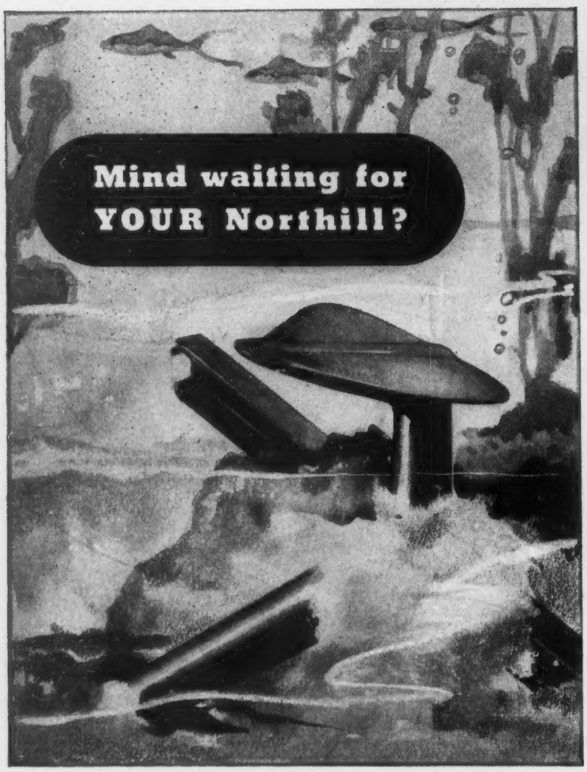

This one's "somewhere in the Pacific"—holding a Subchaser

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Official U. S. Coast Guard Photo

Only the superstructure, with one life raft still made fast, of this torpedoed merchantman remains above water

type of plow developed by one of its own officers. The 85-ton plow enabled the cutter *Fern* for the first time to keep the Illinois River open to river traffic this winter."

Keeping navigable streams clear of ice during the winter months is one of the Coast Guard's most essential and most difficult assignments. As a result, the Service maintains a large fleet of vessels either designed as icebreakers or built with reinforced bows that they may be so used when necessary. The largest icebreaker in the fleet is the 290′ *Mackinac* (ex-*Manitowoc*), while four new vessels designed for this service, the *Eastwind*, *Northwind*, *Southwind* and *Westwind*, are now under construction. In these days, when transportation by water is the essential means of moving vital materials, clearing channels, harbors and canals is as important as escort or combat duty, and sometimes equally dangerous.

+ + +

The peacetime activities of the Coast Guard have been likened to the responsibilities of a "maritime policeman" and, like any successful police force, it has discovered that prevention is the best cure. Accordingly, among its duties, is the "maintenance of lighthouses, lightships, radio beacons, buoys, and all other aids to marine navigation."

Today all but a few lightships have been withdrawn and many lights and sea buoys are out or have been removed for the duration. But there are still the thousands of inshore and inland lights and buoys which must be maintained, in addition to the similar types of marine guide posts in adjacent areas — such as Alaska, the Caribbean, Greenland and Iceland — which are under the naval jurisdiction of the United States.

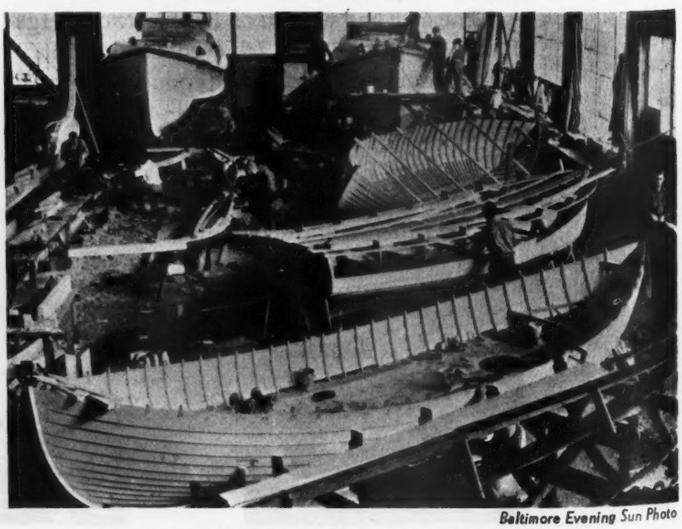
The names of vessels assigned to these duties read like a page from a seagoing horticultural catalog. By classes these ships are:

230′ Cutters Tender Type (AGL Class) — *Balsam*, *Buttonwood* and 17 others.

Miscellaneous Tender Type (AGL Class) — *Almond*, *Amaranth* and 65 others, ranging in size from 201′ to 100′ o.a.

Miscellaneous Tender Type Cutters (AGL Class) — *Alder*, *Althea* and 15 others, ranging in size from 72′ to 99′ o.a. *Lightships:* which are named after their locations, are 39 in number, including numerous relief vessels.

There are, in addition to the above, a miscellaneous group of sizable craft which are used for a variety of purposes, and so well known are most of these vessels that it would be a grave omission not to include them in



Baltimore Evening Sun Photo

The boatbuilding shop at the Coast Guard's Curtis Bay Yard

Examples of today's construction coming from former U. S. pleasure-craft yards in ever increasing numbers. Top to bottom: 110' SC boat built by Peterson Boat Works; 136' PCS boat built by Wheeler Shipbuilding Corp.; 173' PC boat, Consolidated Shipbuilding Corp., (Official U. S. Navy photo)

No fewer than 71 American shipyards are now turning out these deadly Axis hunters and guardians of the Allied shipping lanes. Naturally, we are proud of the part played by Anaconda Metals in the construction of so many of these important craft.

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AGENTS IN EVERY IMPORTANT PORT

CGR-1118. As Arthur Middleton's "Royaltie," she was once the U. S. Power Squadron's flagship

any analysis of the Coast Guard fleet. Among them are the: *Atlantic*, *Beta*, *Beaufort* and *Denmark*.

Last, but anything but least, are the harbor tugs. Yacht-like in appearance but tough in construction, their duties are myriad. They are a familiar sight in almost every major harbor, and are so well known the mention of their names seems almost unnecessary. Ranging from 92′ to 110′ o.a., there are 23 such vessels including the *Appalachee*, *Arundel* and *Beverly*.

\+ + +

The Coast Guard maintains a large design and maintenance section, and from this office have come a substantial majority of the plans for its vessels. Coast Guard craft have long been famous for their fine lines and excellent sea-keeping qualities, a convincing tribute to both their designers and builders.

A substantial number of the Service's small craft (100′ and under) has been built by private yards. The 83-footers, for example, are a product of the Wheeler Shipyard, while the 38′ picket boats have been built by such firms as Richardson, Palmer Scott, Henry Hinckley, Stephens Bros., Ballinger Boat Works, Palatka, and Robinson Marine Construction. In recent years, an increasing number of the larger vessels has also been privately built, as the wartime building program called for many more vessels than Government yards could possibly provide for.

But no reference can be made to Coast Guard construction without mention of the Coast Guard's yard at Curtis Bay, Maryland. This base, which during the early part of the century was the location of the original Coast Guard Academy, now consists of 104 acres and includes a shipyard, drydocks, training schools, barracks, fitting out basins and a variety of other installations.

The new drydock, for example, will take vessels up to 350′ and displacing 3500 tons. At Curtis Bay, much of the canvas work for the Service is done, as well as the production of all kinds of small arms. Whereas it is principally known as a construction and repair base, yachtsmen will be interested in the fact that its boatbuilding shops turn out a majority of the Service's small craft such as life boats and surf boats. Working on a 24-hour day schedule, the yard's building program now includes the construction of 255′ cutters, motor-sailers for the Navy, a wide variety of surf boats and a bewildering variety of conversion assignments. In 1942, for example, the Coast Guard Yard at Curtis Bay built 292 small craft ranging from 20′ to 52′ o.a. It is not uncommon to see a World War sub-chaser, a famous yacht, a lightship or two, a score of commercial fishermen, a large cutter and many smaller craft moored bow to stern in the base's fitting out basin.

\+ + +

It is certainly no exaggeration to say that the Coast Guard could not play its major rôle in the war at sea if it were not for the Auxiliary and Reserve vessels which, by taking over the workaday jobs which in peacetime were done by the Coast Guard's smaller patrol boats, have released regular vessels for combat assignments. Although the multitudinous activities of the Reserve and Auxiliary are each day being reported by the nation's press, it will not be until the war's conclusion that the whole story can be told.

But available records do add significance to even an interim report such as this. It may be authoritatively stated that the Offshore Patrol has been a definite success, and will be continued. The number of yachts now employed by the Service on either a part or full time basis is staggering, and the excellent performance of their crews is in keeping with the finest traditions of American sea service. For the record, it should be noted that over 120 boats were taken from the Great Lakes area alone in the first months of the war, and that 60 of them were moved in a period of two weeks. And most significant is the fact that green crews brought each and every vessel through safely!

Reports James H. Kimberly, Lieutenant Commander, USCGR, Assistant Director of the Auxiliary Division: "The Auxiliary Division at Head-

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"Full Speed Ahead"

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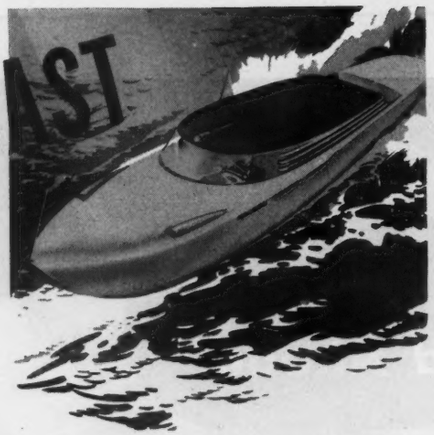
FORECAST



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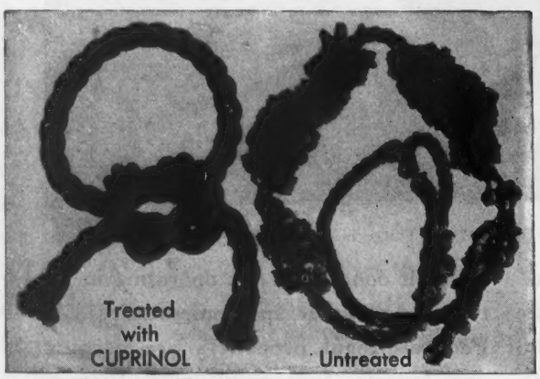

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quarters takes a great deal of pride in submitting that, as of March 1, 1943, it had on its rolls 25,039 Auxiliarists with 15,826 vessels. These men are members of the 542 flotillas from Maine to Hawaii, and from Alaska to Puerto Rico. We feel that this substantial membership exhibits growing interest on the part of boat owners from coast to coast in the work of the Coast Guard. On March 1, 1942, there were 254 Flotillas with 6193 members representing 5631 vessels. This expansion in membership has taken place despite the incidence of the Selective Service Act and the frequent removal of men from their usual places of residence to engage in essential war work."

+ + +

This is the Coast Guard fleet—a unique and the most varied aggregation of warcraft to be found in any nation's Navy. And it is, in every sense of the word, our "first" fleet, and one in which Americans everywhere take justifiable pride.

FIRST ASHORE AT ALGIERS!

(Continued from page 34)

contrasted sharply with the black of British vessels which flanked our beam as the giant convoy formed and took departure. It was now our job to avoid enemy submarines, or do battle with those who found us; to that end, the "tin cans" constantly zagged and zigged and dropped ash cans on every suspicious contact. During these days at sea, the troops busied themselves with cleaning and oiling weapons, climbing debarkation nets we had strung from the rigging, and constantly rehearsing every minute detail learned during their long period of training. The ship's force tuned up the engines of landing boats, practiced gun drill, and prepared the boom tackles for discharging our precious guns and tanks and supplies.

Several days before the attack was to begin, the convoy commodore opened his orders and told his officers where they were going and, briefly, what was expected of them. We in turn informed our men that, on the morning of November 8th, our transport division was going to force a landing at Algiers. Simultaneously, the British forces were to take Oran and other American naval landings were to be made in French Morocco. The week that followed brought to light the most intricate, large scale, planning in military and naval history for an amphibious attack. Army and Coast Guard officers held separate conferences, mulling over the particular problems allotted to each group; then combined conferences and discussions smoothed off the rough edges. Each officer mastered the operations as a whole and then studied his own special job until he was entirely familiar with every detail. There were hundreds of aerial photographs, French and English dictionaries of military and naval terms, performance reports of French tanks and guns, aircraft silhouettes, clay mosaics of beaches and interior terrain (showing the location of every tree, vineyard and house) as well as note books chock full of intelligence reports covering every conceivable detail of our operation. Even special American dollars — invasion money — were supplied for our use ashore. The astounding part of the whole array of portfolios was that every piece was fully printed and illustrated — not mimeographed, mind you, but printed and bound.

WE MADE final preparations to land. Every man studied printed pamphlets, telling him how to safeguard his health in Africa and listing various do's and don'ts in connection with Arab customs. Everywhere one turned, men were loading machine gun belts and Tommy gun clips. Rifles were oiled to perfection, and trench knives were whetted to razor edges. Batteries of jeeps were charged and all vehicles gassed up. Troops were split into landing teams, and each man of each group was familiarized with his boat and his net station. Every afternoon a debarkation drill was held and the Army went to the nets in preparation for the record run which was approaching closer every day. All troop officers scanned maps and planned attacks on their assigned objectives.

During this time, the ship was not idle in making her preparations. Coxswains of landing boats received detailed instructions as to courses and speeds to be used in approaching the beach. Gunnery officers studied ranges and objectives on the beach, the principal target being the fort on Cape Matifou. Doctors made ready operating rooms and emergency dressing stations. Debarkation nets were slung over the sides as we passed the Straits of Gibraltar and entered the Mediterranean, a pleasant blue body of water affectionately known to sailormen of this war as "Bomb Alley."

Next morning, a plane, undetected in the early twilight, swooped over the convoy and loosed a torpedo and several bombs. The stick of bombs fell close aboard our port quarter and the torpedo struck the American transport astern of us. Our stricken sister flashed that sickening word: "hit" and fell astern in a cloud of white steam. Later, this ship managed to lower her boats and delivered all her troops to Algiers — a little late but safe and sound after a trip of 70 miles in open landing craft. So flexible was the plan that the troops on the remaining transports filled in the gaps left by the battalions on the unfortunate ship.

Official U. S. Navy Photo, Elco P.T.

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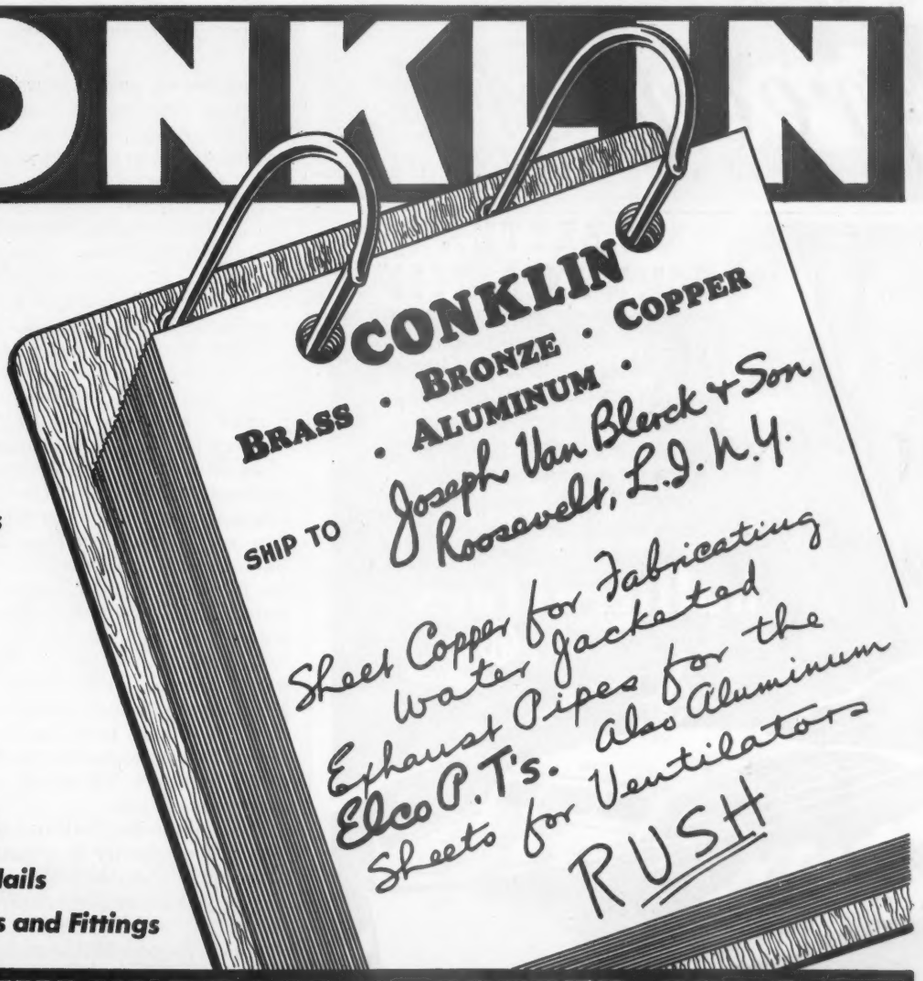

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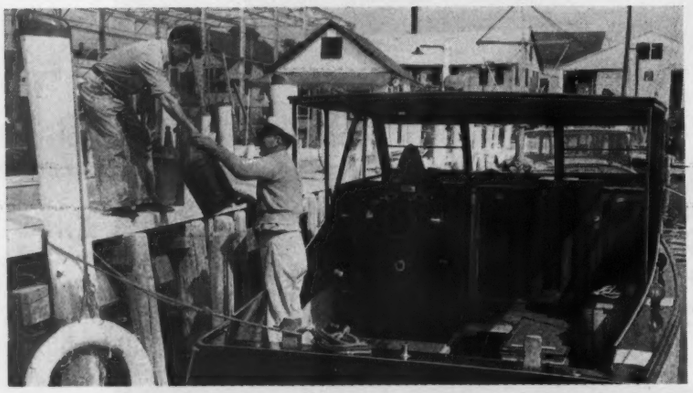
Here's a safe anchorage — and a friendly yard to service and store your ship. Designing and building facilities, too, among the finest in the East — to plan and produce the dream boat that your war-bond savings are now making possible.



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CHICAGO, U.S.A.

The evening before the invasion the convoy fell under aircraft attack, but the planes did not realize our importance and rained the bulk of their bombs on the British fleet of battleships and aircraft carriers. Well into the darkness, the heavens were lit with shell bursts and streaks of red tracer. After the planes departed, the ship settled down to a "last supper," a steak dinner fit for a king. After dinner, the commanding officer of troops spoke to his men over the public address system and wished them good luck and Godspeed. So inspiring and simple in form were the colonel's words that all hands cheered and applauded.

We had been making good a deceptive course for Malta when the time came to take leave of our British companions and escort, and the little American transport division swung around and steered for Algiers. In the darkness, booms were rigged and boat gripes removed, hatch covers were removed, and extra ammunition for our deck guns was loaded into shell hoists. Everything was ready for debarkation at the given signal. A gleam on the horizon told us that Algiers was just over the hump. Hearts began to beat faster and perspiration flowed more freely as the North African Paris, lit up like Coney Island in peacetime, came into view. We drew into position, and then came the word: "Take stations for lowering boats. Away all boats!"

Our boats were lowered, the troops were put aboard, and the boats vanished into darkness on their way to the beach. The division then moved into a new position closer to the shore, and the fort surprised us by a searchlight barrage. Caught in the pencils of intense white light, the transports slid along. Suddenly there was a belch of orange flame from shoreward; the fort had opened fire. A British destroyer, close in, diverted its gunners' attention and a battle royal ensued. The fort shelled the "tin can" and the cocky little "can" defiantly stood off and answered every salvo. By this time, we had successfully rounded the Cape and took up a position about three miles from the beach. The boats started to return and we began sending equipment to the Army on shore. With each vehicle went a certain amount of ammunition as our cargo began to come out of the holds in priority as needed on shore.

BY DAYBREAK, our boats were making steady round trips to the beach. The same little destroyer, endeared to us by the previous night's action, closed in and again bombarded the fort on the point. About noon, a British cruiser started to pour heavy shells into the fort. This remaining point of beach resistance was finally dive bombed by carrier planes and, towards evening, American troops marched in and found Admiral Darlan inside. During the afternoon, the surf became high and treacherous and consequently we began losing boats. At one time all 27 of our landing boats were stranded on the beach. Mechanics managed to get two in running condition and a final total of six boats, including two tank lighters, unloaded our ship in the next five days.

During this time, we were under constant aircraft attack. Every day we would get pot shots at high flying observation bombers, and every morning the Junkers 88's would precede our breakfast and follow our dinner. Always it was the same: just the high flying precision bombers, then the medium level bombers, the dive attacks and finally, in the late twilight, the torpedo plane attacks. The ship's complement fought gallantly. Our six salvaged boats ran constantly from the ship to the beach, even under aircraft attack. Unloading continued under fire. At one time, a torpedo plane released two "tin fish" at our bow. They fanned out and passed down our port and starboard sides so close aboard that you could almost touch them. In fact, one passed between the anchor chain and the stem. Not one man was perturbed; the booms continued working and the cargo was discharged while our guns were blazing.

So continued six days at Algiers. When we departed, our official score was five German bombers. Our crew had unloaded the ship under fire with a few salvaged boats. Living up to the life-saving traditions of the Coast Guard, the beach party had heroically hauled through the surf the survivors of the American transport *Leedstown*, sunk by aircraft bombings and enemy torpedoes. We had all weathered so many near bomb misses that they became a joke.

Proud of the fact that we received commendation from the British Admiralty for gallantry in action, our transport and one other remaining American ship started back to England for more troops. Still in our minds was the message sent in to us from the British battle fleet outside the harbor and just over the horizon. It wanted to know which American battleship had slipped into Algiers, so intense was our anti-aircraft fire. Thereafter we were dubbed the "battleship."

Our return voyage was uneventful, except for one morning at 3:20; one or two submarines dodged the screen and torpedoed the other remaining American "trooper" from our division. A British transport was sunk by the next torpedo, and terrible to behold was the handiwork of the final torpedo. Not 500 yards astern of us, the British aircraft carrier *Avenger* was blown up and vanished without trace in a few minutes. That is one incident in the cruise of our ship that everyone wants to forget.

The remainder of the voyage to England and the return to Algiers with

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"WE USED HIGGINS BOATS TO TAKE THE BEACH" dispatches flashed from the Solomons said. Fast, rugged Higgins Landing Boats that put troops dryshod on sandy or rocky ocean beaches. Highly maneuverable Higgins "Crocodiles" that discharge cargoes of tanks and equipment the instant a beach-landing is effected. Powerful Higgins PT Boats for protection and assault.

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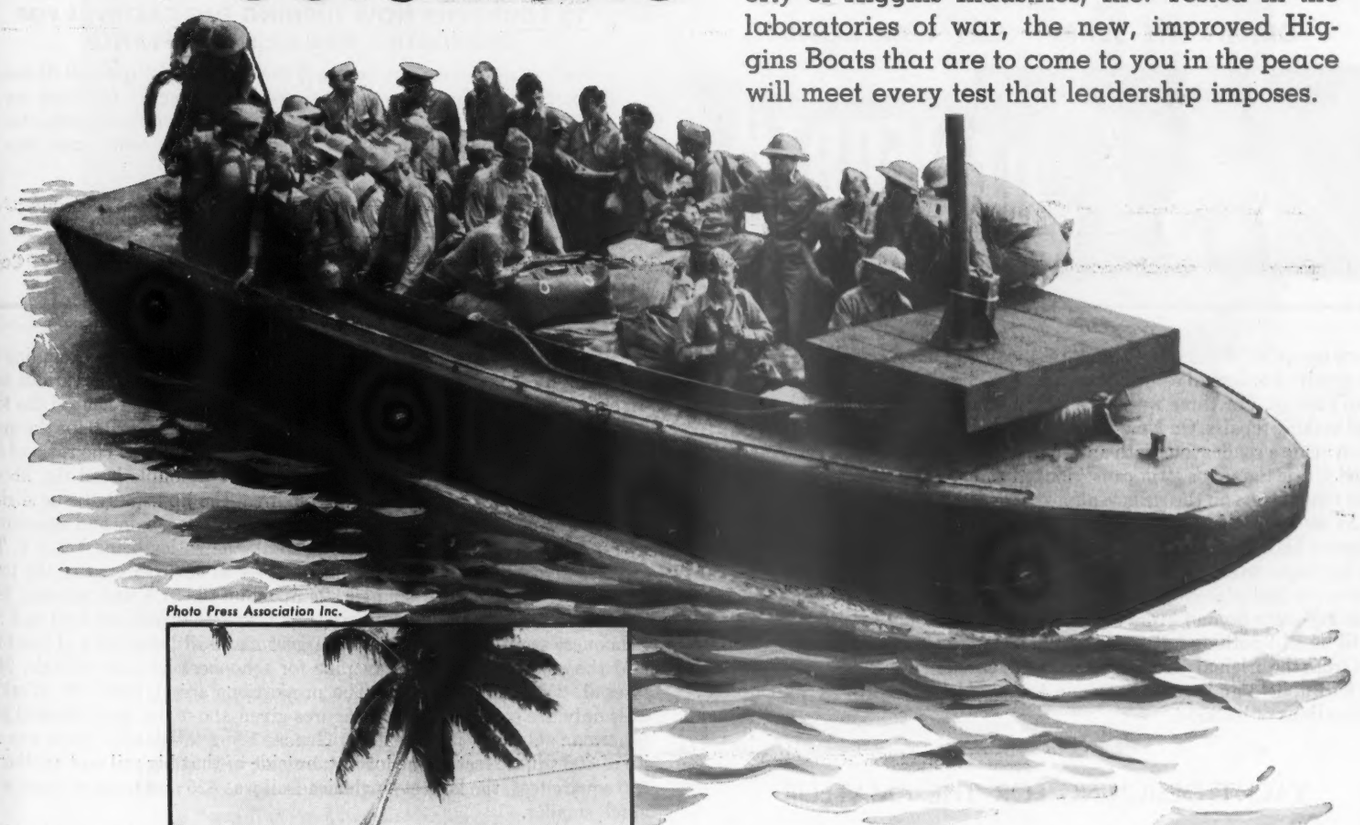

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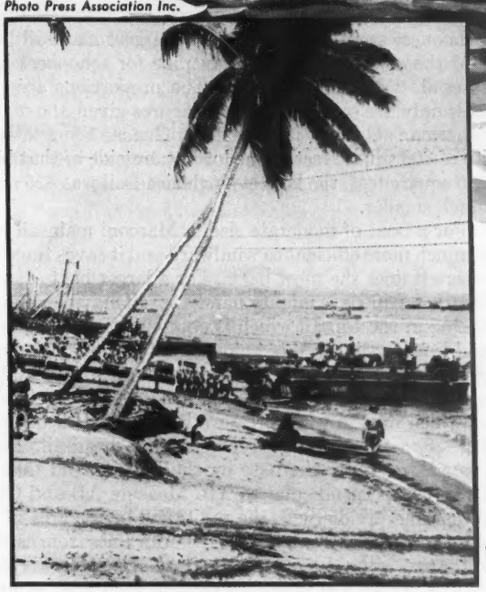

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With lives and battles at stake, the Danforth is making an important contribution to the success of amphibious operations from Africa to the Solomons.

Photo: Courtesy U. S. Coast Guard

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more troops were marked by only spasmodic submarine attacks. At Algiers, we received orders to return home and stop at Gibraltar to await an American convoy. For three weeks we remained at Gibraltar, resting our crew and making repairs. On New Year's Eve, we stood to sea and the next afternoon made a rendezvous with an American escort. One will never know how good Uncle Sammy's "tin cans" looked to us. They zigzagged around us and fought subs on the surface almost every night.

As we approached the coast of the United States, the commodore still fingered his stop watch; the captain still paced the bridge; the ensign dined on his finger nails; and the sailor still wrote his girl. But one thing we did know: we had placed the first boatload of American troops ashore in the opening of the Second Front; we had successfully fought Hitler's Luftwaffe until he had nothing left to throw at us; and we were the only transport left from the original division. Each and every man was proud to know that he had upheld and would continue to uphold the traditions built up by generations of his kind.

YACHT DESIGNING FOR THE AMATEUR

(Continued from page 45)

will try to come around and look at you for she gripes terribly. And one does not learn the finer points of sailing in a boat without a jib. The cutter or sloop rig is good for a boat up to 35 or 40 feet water line though there will be plenty of work on the boat of the larger size. Ketch or yawl rig is good for boats of 30 to 45 feet water line length or even a bit larger; above that size, the schooner is the thing.

In designing the rig for a cruiser, forget all about the measurement rules for racers and lay out the rig for convenience. In a yawl or ketch, make the mizzen a decent size instead of the little rag the racers use to get a favorable rig allowance. In a yawl, for instance, the rig should be designed so that the boat will balance under whole sail, jib and mizzen, or mainsail alone. This usually means that the mizzen will be about as big as the headsails and not merely 10 per cent of the total sail area. The mizzen of a ketch will be even larger since the mast is further forward. The schooner should have a decent sized foresail, not a narrow strip of canvas between the masts, since a foresail that is narrow and short on foot and head will not stand decently but the gaff will swing away off to leeward as soon as the sheet is started.

Comparing the sail plans of a number of cruising yachts, excluding the out-and-out racers, we find the following proportions of the various sails. In sloops and cutters, the mainsail runs from 61 to 80 per cent of the total sail area, the average of thirteen chosen at random being 70.3 for the mainsail and 29.7 for the fore triangle (jib and staysail only). The ratio of fore triangle to mainsail is 1:2.37. In the boats with double head rig, jib and staysail are not far from being equal in area, the jib usually being slightly larger. For eight yawls, the areas of fore triangle, main and mizzen are about 25, 60 and 15 per cent of the total, the ratios being 1:2.4:.6. Ten ketches give the mainsail ranging from 44.4 to 65.3 per cent of the total, the average being: fore triangle, 24.5; mainsail, 51.5 and mizzen, 24.0. Taking the fore triangle as unity, the other sails would be 2.09 and .98. Schooners seem to differ less, the largest mainsail being 56.4 of the total and the smallest 44.6. The average for schooners is: fore triangle, 24.9; foresail, 25.9; mainsail, 49.3. The proportions are: 1:1.08:2.10. Working sails only are considered in the figures given above, no quadrilateral jibs, fisherman staysails, jib topsails or Genoas being tabulated. There was one jib of 800 square feet in the lot but, outside of that big sail and another of 510 square feet, the largest single headsail was 325 and most of them were much smaller.

For a boat of moderate size, a Marconi mainsail is advisable since it is so much more efficient to windward and it saves the weight of the gaff aloft, where it does the most harm. For a larger boat of, say, 50 feet water line length, a gaff rig is mighty handy as sail may be reduced quickly simply by taking in the topsail which is equivalent to tieing down a couple of reefs and much easier to do. A downhaul to control the gaff is a good piece of gear to have when shortening sail in a breeze of wind.

Now for the calculation of the sail area and the Center of Effort, the CE, at which all the wind pressure is supposed to be concentrated. Look at Fig. 26, a triangle ABC representing a headsail. To get the area of this triangle, multiply the base by the altitude and take half of the product. Draw CG perpendicular to AB. Measure AB and CG, multiply them together and divide by 2; the result will be the area of the triangle. To find the center of the triangle (its CE) draw lines from each corner to the center of the opposite sides, CD, BF and AE. Each line divides the triangle in half and its center will lie somewhere on each line; it must be at their intersection at H.

A four-cornered sail is divided into two triangles and the center of each found in the same manner. The quadrilateral ABCD in Fig. 27 is divided

THIS YEAR'S CENTURY FLEET IS ALL FOR FIGHTING MEN!

Included in America's ever-growing bridge of boats are certain small craft which play an exceedingly important part in our world wide war movements. These are Storm and Assault Boats—tough devils, built to take a beating, and to handle like a feather.

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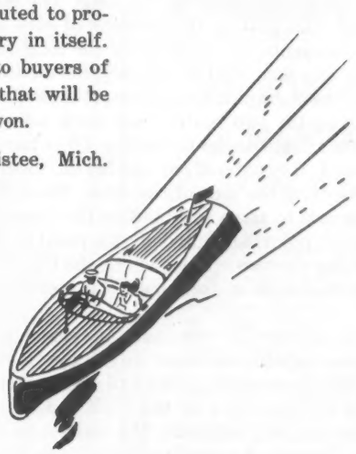

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into the two triangles ABC and ACD and the centers of these are found to be at J and K. Draw JK. Now draw DB, forming two more triangles BCD and BDA, whose centers are at M and N. Draw MN. The point where JK and MN cross, at O, is the center of the quadrilateral. To find the area of the whole figure, draw DP and BQ, at right angles to AC. Measure AC, DP and BQ. Multiply AC by the sum of DP and BQ, divide by 2 and the result is the area of the figure. This result may be checked by drawing perpendiculars to DB from A and C and proceeding as before.

To get the combined CE of two sails (Fig. 28), erect a perpendicular CD to the water line somewhere clear of the headsail and measure the distance from it to the center A and B of each sail. Then multiply each distance by the area of the sail, add the products (which are moments) and divide by the sum of the areas and the result will be the distance from the perpendicular CD to E, the CE of the two sails. The same procedure is followed with several sails, getting the moment of each about the perpendicular, adding the moments and dividing by the total area.

With only two sails, the CE naturally lies on the line joining their centers and we may use a graphic method to get their CE (Fig. 29). Draw the line AB connecting the two centers and draw a line AC and BD from each center, either at right angles to the line AB or parallel to each other. On the line AC from A, the center of one sail, lay off, to any convenient scale, a distance representing the area of the other. From B on BD, lay off the area of the other sail to same scale but in the opposite direction. Connect B and D, the two points measured off; the point in which this line crosses the line AB joining the two centers will be the CE. With more than two sails, you can use moments or use the graphic method just given, step by step.

If what we call the CE were really the center at which all of the force of the wind were applied, and what we call the CLR were really the point at which the lateral resistance of the hull were centered, we could arrange the rig with the CE directly over the CLR and all would be well. However, these centers are only fictitious. The resistance of the hull is not at the CLR but shifts around according to the angle of heel, the angle of the apparent wind, the speed and the shape of the boat. A wave rolls up under the lee bow to complicate matters still further and the boat does not advance straight ahead when on the wind but travels at a slight angle with her center line. As for the sails, the calculation above assumes that the sails are all plane surfaces, are on the center line, with the center of each sail at its geometrical center as found above. Now the pressure of the wind on a sail is far from being uniform all over its surface; no sail is a plane but has draft, different at each point; and the sails are not upright but heeled at varying angles nor are they on the center line of the boat. So that the whole question of balance is a severe headache.

What we have to do is to place the sail plan and shape the under water profile and the centerboard so that the CE and CLR will have a certain relation to each other which experience shows to be about right. This relation varies with the rig, the form of the hull, the strength of the wind, the speed through the water and the angle the keel makes with the direction of the wind. Simple, eh? So we place the CE ahead of the CLR by a certain distance known as the lead (with a long e), usually expressed as a percentage of the water line length. This lead, in the old gaff-rigged schooners was as little as .5 per cent and in the cutters of the same period might be 3.0 per cent. In modern cutters with Marconi rig, the lead may be as high as 10 per cent or even more. I have known it to be as high as 15, and that boat handled well but was hard on her helm when in a strong quartering wind.

When designing a boat of a type with which the naval architect is unfamiliar, the question of lead keeps him worried until he has tried her out under sail. Really, the best way to determine the amount of lead to give a design is by comparison with a successful boat already built. The trim of the sails makes a difference as a slight pull on a sheet may ease a stiff helm or erase a weather helm. Many a boat may carry a slight lee helm in extremely light airs and be a perfect lady when it breezes up a bit.

(To be continued)

THE POST-WAR SMALL BOAT

(Continued from page 40)

caught dredging oysters in her; but never mind, if she's good, she'll get beautiful (like a rich man's lady) or will set new standards of beauty of her own. From here on, we leave you to do your own dreaming. No doubt the most desirable improvements made possible through this new development have not occurred to us or anyone else, so the field is wide open. But, before you get your mind all set to go sailing around in a boat from a Buck Rogers' comic strip, let's look at the economic side of the thing.

From the work that has been done with small boats up to the present, it would appear that moulded plywood hulls can be built to compete in price with conventional hulls of present design. This may not be so in specialized cases like that of the canoe, where hulls are now built in large quantities by highly developed technique and where the selling price is low.

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There is nothing to indicate that moulded hulls will undersell the present type of boat unless they can be made in much larger quantities. But, after all, our present boats could be built at lower cost in larger quantities. It is said, and perhaps rightly, that the new process has greater low cost possibilities in volume production but the quantities in which boats of any kind are built at present does not begin to exhaust the possibilities of further economies from increased quantities. So present construction methods have the same opportunities open to them for some time yet. The mere fact that, if the demand is great enough, the price will come down, does not in itself create that demand. If some brave and wealthy soul were to take the bull by the horns and design a line of boats and build enough of them to realize these economies, and then offer them at a reduced price, there is nothing to guarantee that the demand would increase in any related proportion to the increase in quantity. It seems to be an axiom of American enterprise that, if you can build enough of anything, you can make a million dollars. Henry Ford and the automobile are cited to prove this. Unfortunately, we can hope for no such miracle in the boating field. An urgent need for the automobile existed. People had to travel and, while the full development was slow and spread over a long educational and road building period, there was no real competition from any other similar means of personal transportation. The general public has no pressing need for small boats. Large groups have no place to use them if they had them. They are a sporting luxury and must compete with every other form of outdoor recreation. While the long range social trend is certainly toward more leisure and more outdoor sport of every kind, each sport moves in individual cycles of popularity. We firmly believe that boating is going to continue to increase as it has for many years — but this may not apply equally to all kinds of boats. Sailing may suffer a severe blow as the result of a boom in glider enthusiasm, or it may boom because of its many points in common with flying.

A few things seem certain. More people are going to spend more time out of doors. More waterways and water recreational areas are going to be created. This speaks well for boating as a whole and the small cruiser and auxiliary in particular, but there is nothing in sight that is going to give us suddenly vast new quantities of low cost boats. As the demand increases, the cost will go down but, unfortunately, the demand must exist before we can gain its benefits.

For some time, at least, the present conventional type of construction will hold its own. It can compete economically — and will — until the superior nature of the new construction is more than proven and drilled into the public mind, and until the superior qualities of designs create an overwhelming demand. This will take a much longer time than one might think.

(To be continued)

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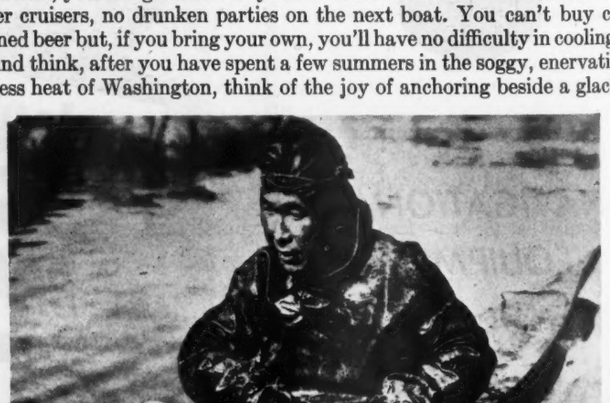
ARCTIC NAVIGATION

(Continued from page 29)

horizon is definitely bright, you are likely to find ice in that direction.

The possibilities of Greenland for yachting excursions after the war are exciting. There are no prohibited anchorages. You can drop your hook anywhere, you can go ashore anywhere. There will be no loud radios from other cruisers, no drunken parties on the next boat. You can't buy cold canned beer but, if you bring your own, you'll have no difficulty in cooling it.

And think, after you have spent a few summers in the soggy, enervating, lifeless heat of Washington, think of the joy of anchoring beside a glacier.



The waterproof suit allows the kayaker to roll his boat over, which requires great skill. The unskillful get head down — and stay that way, which tends to induce drowning

FROM SUMMER SKIPPER TO BEACH BUSTER!

U. S. MARINES charging up the beach at Guadalcanal . . . International News Photo.

They may have been "speed demons" at Miami —

Or sailed on Buzzard's Bay —

Or pulled bass from Lake St. Clair —

They may have come from "fo'c'sle" or afterguard —

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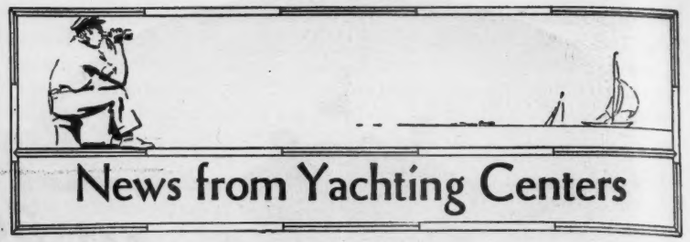

News from Yachting Centers

MASSACHUSETTS BAY FLASHES

By Ed Earle

▶ From the recent meeting of the Massachusetts Bay Y.C.A. with Commander F. M. Meals, U.S.C.G., Captain of the Port of Boston, specific information for the coming season was crystallized. The regulations for yachting for 1943 will be the same as last year. There will again be boat registration, with waterfront identification cards and the blanket permit to allow boats to cross the main ship channel on racing days, under tow, as was the practice last year. Yacht clubs will make up their schedules and file copies of the same with the Captain of the Port of Boston, the same procedure as that followed last season.

It is desired that motor boat men put their boats in the water since the summer season always presents a need for their use, particularly during these times when their presence may mean so much if an emergency arises.

▶ Racing boats which are put into the water and made ready for use, meaning that they can get under way either under sail or power, are subject to tax. Most boats, at least those which were in commission last season, already have had their tax paid until June 30th. The tax for 1943–44 will be required after that date. Boats which are put in the water and are not readily put under way by sail or power, but are put on a mooring, are not liable to tax.

▶ Marblehead looks forward to a good season in the limits prescribed last summer. The Eastern, Corinthian and Boston Y.C. will all have racing fleets in action. The dean of racing skippers, Charles Pelham Curtis, of the Eastern, will put his Thirty-Square-Metre *Ellen* in commission again. Ex-Commodores Walter R. Bell and Daniel E. Watson, of the Corinthian, had their moorings down early last month. Bell's M-B Class *Chinook* and Watson's former Swedish Roosevelt Bowl winner *Lill-Singva*, are being primed for action. With so many of last year's light sail men in the service, a new crop of spinnaker men will be developed. . . . The Swampscott Y.C., leading port of the Yankee Dories, expects a lively season.

▶ Harry Browning was elected commodore of the Medford B.C. for the fourth consecutive year at last month's annual meeting. The other officers and standing committee men are Vice Commodore Kenneth Campbell; Secretary-Treasurer Neil Elder; Club Captain George Cooper; and members of the executive committee, Earle Nichols, Melville Goddard, John Black and Lynn Marsh. . . . The Mower-designed Hustlers will be one of the mainstays of Boston Bay racing with 25 to 30 boats in action. The annual meeting brought out an enthusiastic gathering of more than 30. John Kerrigan, of Quincy, was reëlected president and Robert X. Perry, vice president. The Massachusetts Bay Hustler Association is going ahead with a complete schedule and will continue with the point system.

▶ The Winthrop Y.C. members of the racing fleet in the Service include William R. Finlay, Coast Guard, and Joseph Flynn, Army, both of the 15′ Class. The Hustler Class comprises Lt. John A. Curtin, Army, recently married to the former Virginia Leach, star girl skipper of the Hustlers; Gordon Cloran, Coast Guard; Hubert McKenna, Navy; Paul Thayer, Marine Corps; Ronald McKay, Army; Fred Neal, Coast Guard; John Snyder, Robert Milne, Richard Felch and Bob Seifert, Navy. . . . Another Coast Guard Auxiliary Flotilla was formed at the South Boston Y.C.

▶ Quoting from a letter received from Charles Pestier, of the South Boston Y.C., now with the 8th Bomber Command, England: "We who are thousands of miles away from our friends can probably better appreciate than those at home how fortunate we are to be members of an organization such as the South Boston Y.C. In most countries — and England is no exception — clubs of that sort are not for the average man but for those with considerable means. Men like ourselves must depend for their recreation chiefly upon pubs, or taverns, and we all know that such places, while they serve to introduce us to new friends, are not conducive to fraternalism. So here's hoping the members of our club soon begin to realize that they have something that is peculiar to America, the opportunity to make friends and wherewithal to bind together in firmer bonds."

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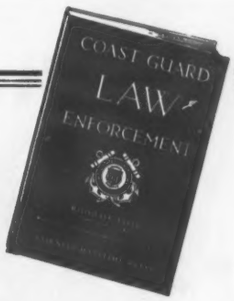

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By Ridsdale Ellis

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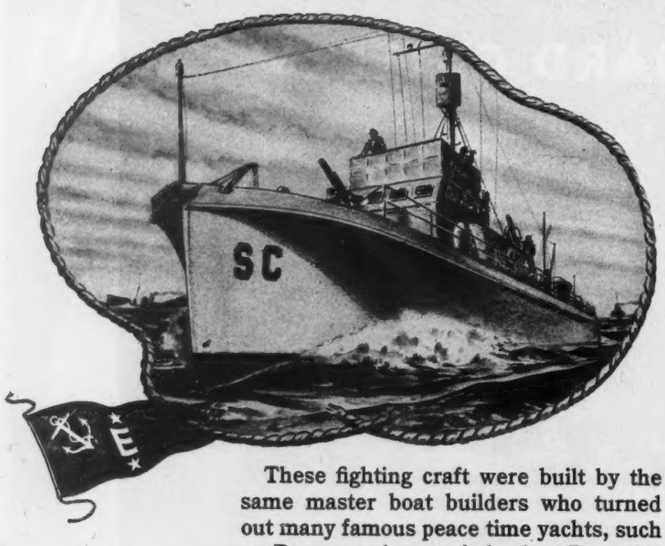

These fighting craft were built by the same master boat builders who turned out many famous peace time yachts, such as Baruna, winner of the last Bermuda race; Tioga, holder of the New London to Marblehead, all-time course record; Tioga Too, with 18 "firsts" in 24 starts in 1939. After the war, we'll build more such yachts, including racing craft of the Yankee 1-Design and Adams class.

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The International News Photo above shows Lieutenant General Thomas Holcomb (left), Marine Corps Commandant, and Major General A. A. Vandegrift (right), studying Japanese positions. The photo was made during General Holcomb's recent air inspection tour of the Solomon Islands. Colonel Clifton B. Cates stands between General Holcomb and General Vandegrift.

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FROM SAN FRANCISCO BAY

By Jesse L. Carr, M.D.

▶ With the official opening of the yacht racing season on San Francisco bay only a little more than a month away, the program for the season is rapidly shaping up, although details and plans are as yet not complete. The Y.R.A. is assuming that the Navy regulations, as interpreted by the U. S. Coast Guard last year, will remain as before and, inasmuch as the Coast Guard has expressed itself as completely satisfied with the conduct of racing yachts during the past season, it seems that a full program of racing may be anticipated within the restricted boundaries of the bay. According to the last information from J. Vincent, Jr., who succeeded Lt. Robert White as chairman of the Y.R.A. after the latter's entry into the Army, the Aeolian and St. Francis Y.C. have already applied for regatta dates; the Corinthian Y.C. has scheduled its annual Vallejo Race, and the same number of handicap classes will race this year as last, with a retention of the seconds-per-mile system introduced in 1942. The San Francisco, Berkeley, and Richmond Y.C. have not yet applied for their regatta permits but their members anticipate regattas.

▶ This week, secretaries of One-Design Classes have been circularized by recorder Harry Struthers and it seems now that at least over half will have enough boats in the respective classes to qualify for regatta competition.

The Northern California Power Cruising, Associated, will decide at its annual meeting the extent of the activities of motor boat racing for 1943. Commodore Edward Dollar, Jr., who was recently commissioned lieutenant in the U. S. Naval Reserve, believes the usual power boat races will be held. There is on the West Coast no gasoline rationing for boats, so that the "over-the-bottom" contests will take place as usual.

▶ In anticipation of the racing season, sail boats are again changing hands, Dr. Victor Kagan having purchased the Golden Gate Class boat *Ruthie*. He will rechristen her *Cyrené*. A. J. Beckett, former owner and skipper of the Bird *Dodo*, has recently bought the 45′ cutter *Pajara*. *Pajara* was sold south several years ago after competing in the Honolulu Race as an entry of her builders and owners, the Stephens Brothers. The Stephens Yard in Stockton, which also built the Farallone Clipper Class and many other well known power and sail boats on the Bay, has launched or has under construction more Army and Navy craft of small design than all the other small boatyards in the Bay District combined. Among these are three mine sweepers, 20 38′ Coast Guard Auxiliaries, 21 104′ boats for the Army and 12 63′ offshore craft for the Navy. In project, are a number of other boats for Army and Navy, including a fleet of tugs and patrol craft. They have completed their projected new yard.

▶ Stockton is rapidly becoming a boatbuilding center. In addition to this activity at the Stephens plant, the Colberg Works are working on Army contracts for barges and other boats in an enlarged yard. The Moore Equipment Co. has a contract for the Navy and the Pollock-Stockton Ship Building Co. is also working on a government contract. Kyle & Co. are working for the government, and the Higgenbotham Brothers yards are building a group of government barges. Clyde Wood is also constructing boats for the Army and is supposed to have between 15 and 20 craft on the boards. The Jones Hardwood Lumber Co. is finding a far greater volume of its bending oak going to out of town localities now than is shipped to local yards. In addition to activity in Stockton, the Sacramento Ship Building Co. is building barges for the government, and the Basalt Rock Co., at Napa, has a government contract for barges and carriers.

▶ *Sheik*, formerly owned by George Pope and used on Lake Tahoe, has been shipped down by flat car and sold to the Army. Frank Kent has sold *Magic Carpet*, in which he was twice a participant in the Honolulu Race, and has bought the 106′ steel yawl *Contender*. She was brought to San Francisco from Los Angeles several weeks ago and is now in the municipal yacht harbor being reconditioned. Aldo Allisio, former owner of *Valkyrie*, has bought *Nautigal* from Ben Blum, who is now in the Navy. *Nadine II* has been sold and Mr. Andrews, her former owner, has bought the *Dorothea*. She will sail from the San Francisco Y.C. *Dorothea* was built in Manila several years ago where she was constructed of the finest of Philippine wood and copper-sheathed against the ravages of tropical marine growth. It is her skipper's first venture in sail. The 1939 Moon Class Champion *Luna Pike* has been bought by Harold Baker.

▶ All yacht clubs have been invited to send entries for the schedule of races for the William M. Smith Trophy. This trophy is for National One-Design competition and six races have been scheduled for 1943. Two of these will be at the Sequoia Y.C. on the 4th and 18th of July, while four will be raced at the Palo Alto Y.C. on August 15th, September 12th, October 12th, and November 14th.

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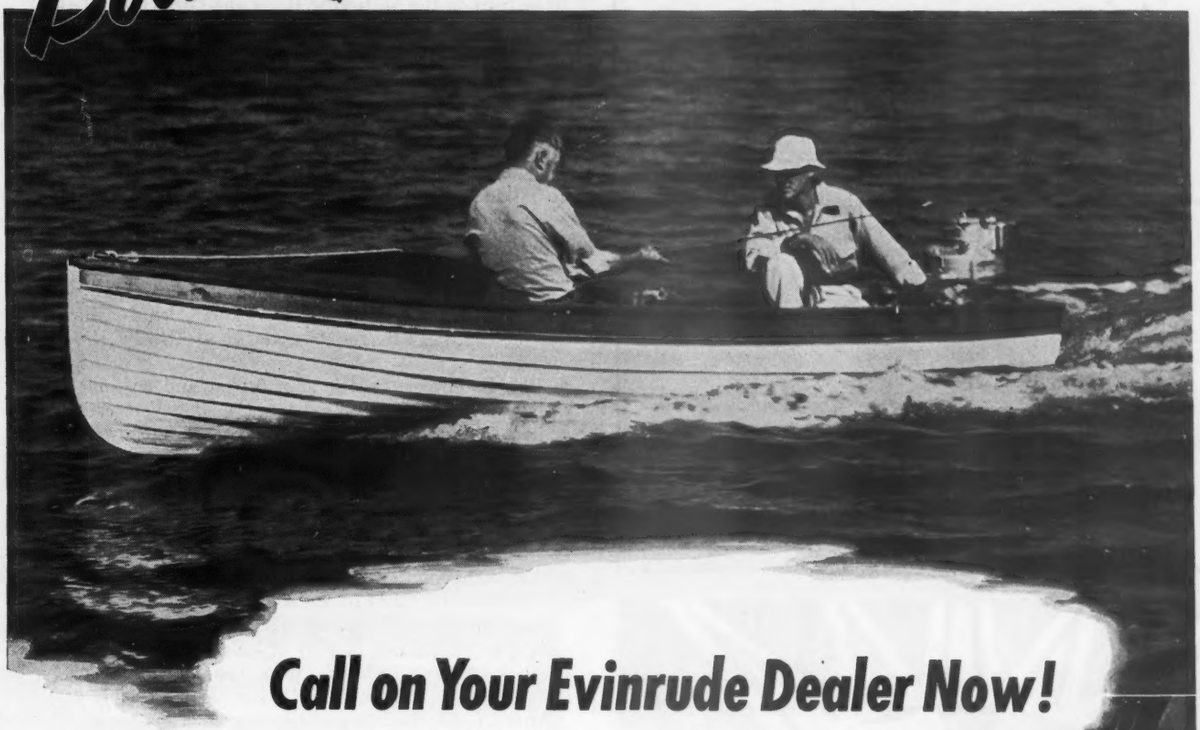

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PACIFIC NORTHWEST CAT'S-PAWS

By Ray Krantz

▶ *Sea Bee I*, new 83′ towing vessel, was sent down the ways at Seattle on April 7th. Built by Puget Sound Bridge and Dredging Co. in the owner's west waterway shipyard, she is destined for Alaskan service, as are other identical vessels under construction at the same plant. The vessel, designed by L. H. Coolidge and Edwin Monk, will have a 6-cylinder 350 hp. four-cycle Washington Diesel for power.

Naval architects Monk and Coolidge are also the designers of ten steel tugs built in knockdown form at Leavenworth, Kansas, by the Missouri Valley Bridge and Iron Co., for use in Canada. Three craft are 74-footers with twin 135 hp. Caterpillar Diesels, while the other seven are 87′ tugs with twin 350 hp. Vivian Diesels of Canadian manufacture. The vessels are to be used on the McKenzie River and Great Slave Lake.

▶ Tugs appear to take the limelight from the Pacific Northwest this month. The Sagstad Shipyards, Seattle, launched the first of a series of 127′ twin screw wood ocean-going tugs for the Army, on March 31st.

Another 127-footer for the Army's towing fleet was launched at the Bryn Mawr plant of Barbee Marine Yards, on March 17th and a third was scheduled to go overboard April 10th.

Without any celebration, *MT-279* and *MT-280*, a pair of new 36′ tunnel stern tugboats for Army service, were launched on March 29th at Grandy Boat Company, Seattle. A trio of similar 36-footers is being built by the Adams Boat Works, Seattle, also for Army use.

YMS-338, new 135′ mine sweeper, went overboard on March 20th at Seattle Shipbuilding and Drydocking Corp. On March 27th, at Ballard Marine Railway Co., Inc., Seattle, an identical *YMS-330* was launched.

▶ Bob Landweer, Seattle ship broker and customs agent, has bought, through O. H. ("Doc") Freeman, the 32′ Schertzer-type cruiser *Whocares* which is powered with a Gray Six-120. R. J. Stowell, Seattle Y.C., is the old owner; Landweer will continue to fly the club burgee aboard *Whocares*.

Herbert Gould, Jr., Seattle, has sold his 42′ Monk-designed bridge deck cruiser *Betty Lou II* (ex-*Calypso*, ex-*Migrator*) to G. T. Large, of Portland. Large, with the Portland C.G.A., sold his 30-footer before buying *Betty Lou II*. Roy Corbett, of Marina Mart, Inc., Seattle, handled the sale; he also sold R. J. Lamont's 36′ cruiser *Hyades*, with 100 hp. Hall-Scott engine, to the Continental Can Co., for Alaskan service.

Gardner Gamwell, Seattle Y.C., is looking forward to the scheduled arrival at Seattle late in May of his new acquisition, the 57′ knockabout staysail schooner *Renegade*, from Los Angeles. Gamwell purchased the craft, ex-*Water Wagon*, from Grover Garland, of L. A.

Arne Vesoja, Seattle yacht broker and charter agent, has bought the property where he carries on his business from the Vic Franck Boat Co. Vesoja recently sold the 38′ cruiser *Cavalier II*, with 50 hp. Kermath, to H. W. Montgomery, Seattle, for William Merritt, Seattle. In another deal, Vesoja sold an 18′ Sea Gull sail boat to Walter Andrews, Mercer Island, for Virgil Paul, Seattle.

▶ Seattle Y.C. May events: May 2nd, opening day regatta, races for all classes, power and sail; May 9th, Mark Mayer Trophy race, Lake Washington; May 22nd, rendezvous at Port Madison, and on May 23rd, the Hat Island race; May 29th, Frisbie Trophy race; May 30th, Commodore's race. Star races, May 2nd, 9th, and 16th, with world's championship eliminations on May 29th, 30th, and June 6th. Flattie races, May 2nd, 8th, 9th, 15th, 16th, and 29th. On June 5th and 6th, the international elimination series.

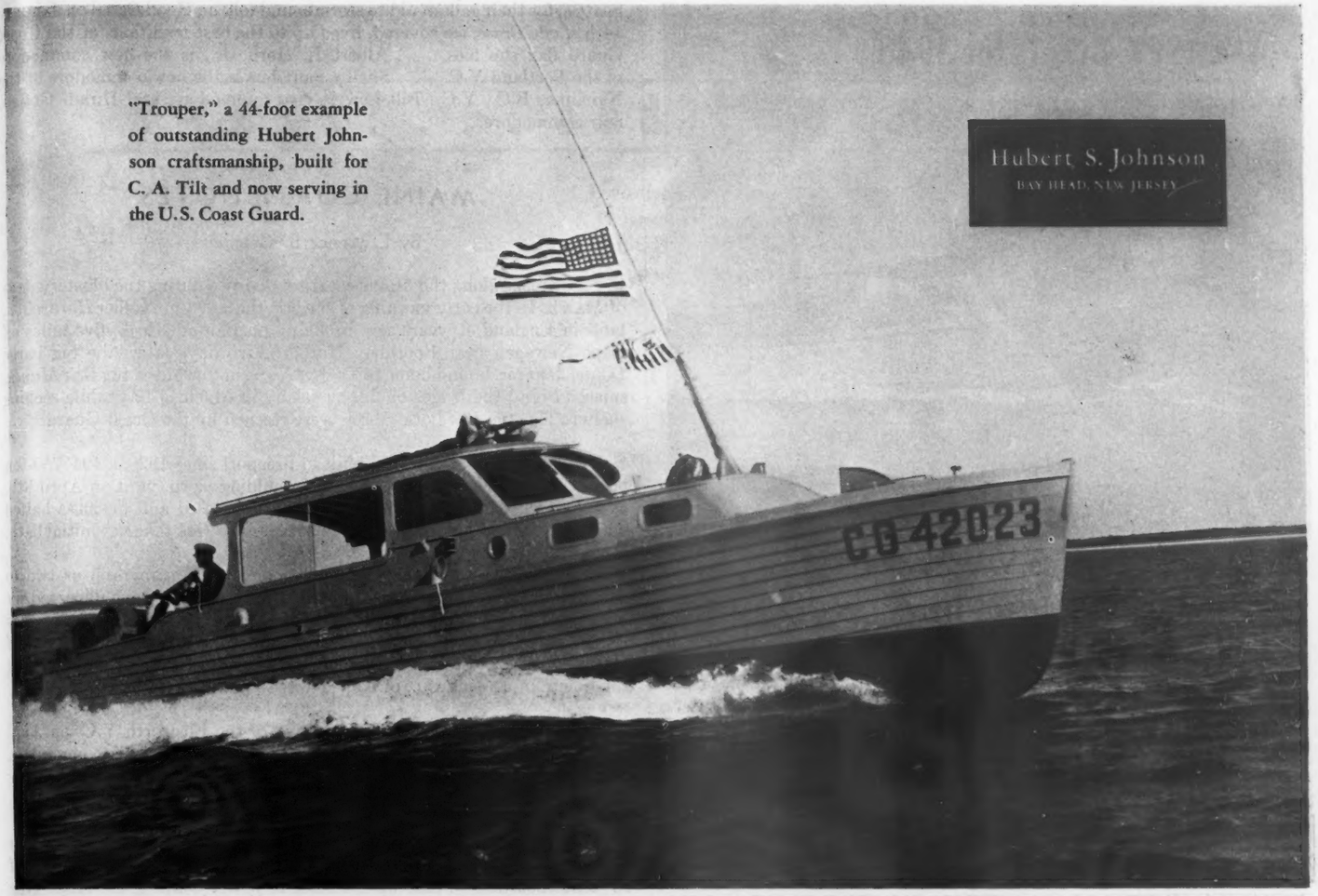
Memorial Day cruise to Port Madison for power yachts on May 29th.

▶ Larger and abler are the new 148′ freight and passenger vessels which are to be built in series of six vessels each, at the Northwestern Shipbuilding Co., Bellingham, and Pacific Shipways Division of Anacortes Shipways, Inc., Anacortes, for the Army. These vessels were designed by H. C. Hanson, Seattle naval architect.

Patterned after the 50′ Coast Guard patrol boats built in many Seattle shipyards from designs by Mike Shain, is a new 55′ crab fishing boat *Hydah*, with a 6-cylinder Mack Mariner Diesel of 100 hp. Shain Manufacturing Co. built her for Wakefield and Sons.

▶ *Cat's-paws:* The Chris-Franklin Manufacturing Co., Edmonds, is building a large number of 28′ plywood river tugboats, of the pusher type, for the Army; designer, Edwin Monk; power plant, Gray Four-52 with 2:1 reduction. . . . The Martinsen Shipyards, Inc., Anacortes, has been taken over by a new company, North Pacific Shipbuilding Corp., which will complete the yard's contract for a number of 40-foot motor-sailers for the Army. . . . Ralp C. James, Jr., and three crew members of the C.G.A. cruiser *Lady Grace*, were praised by the commandant of the Coast Guard at

"Trouper," a 44-foot example of outstanding Hubert Johnson craftsmanship, built for C. A. Tilt and now serving in the U.S. Coast Guard.



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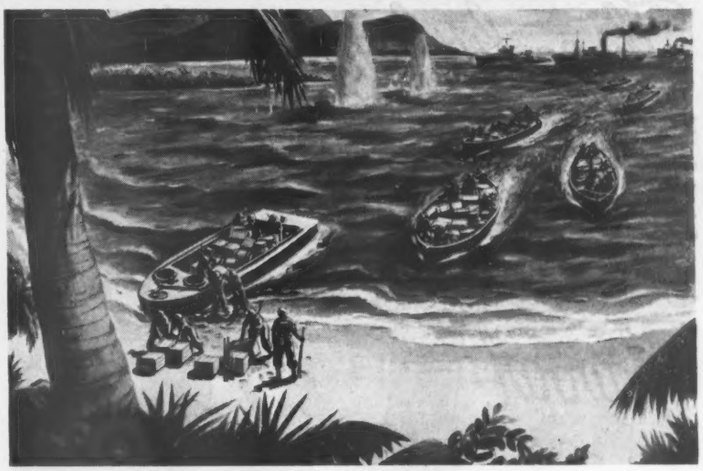

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Seattle, for their gallant aid to stormbound folk on Hood Canal on January 14th; *Lady Grace*, ice covered, lived up to the best traditions of the Coast Guard flag she flies. . . . Albert E. Horn, Jr., is the new commodore of the Portland Y.C. . . . Shelby Saunders is the new commodore of the Nanaimo, B.C., Y.C.; Bill Low is vice commodore, and Hiram Gough, rear commodore.

MAINE COAST NOTES

By Lawrence B. Getchell

▶ Shipwrecks along the Maine coast totaled two during the blustery days of March. In the early morning of the 5th, the 3,078-ton collier *Hartwelson*, built in England 40 years ago, broke up on Bantam Rock, five miles off Cape Newagen near Boothbay Harbor. Five days later, the big barge *Daniel Munroe*, bound home to Digby, N. S., in tow of the tug *Otis Mauck*, smashed onto the ledges off Libby Island in Machias Bay while seeking shelter. The crews of both vessels were rescued by the Coast Guard.

▶ The first sawn frame vessel built in Freeport since 1920, a 194′ 750-ton barge, was launched at the Casco Shipbuilding Corp. yard on April 8th. It was a big day for Freeport. Schools were closed and business halted while the whole town turned out to see the *Red Oak* take her initial bath.

▶ From time to time, this column has devoted a paragraph or two to Maine-built vessels well-known in these waters which have departed for other lanes to serve in some phase of war-related activity. Latest to go is the 101-ton tug *Eugenie Spofford*, formerly owned by the John L. Goss Granite Corp., of Stonington, but now the property of a group including the Sheridan Towing Co., of New York.

▶ Officers chosen at the annual meeting of the Ellsworth Y.C. on April 6th, are: Commodore, Gilbert Sheldon, Providence, R. I.; vice commodore, O. W. Tapley, Ellsworth; rear commodore, H. Blaine Davis, Ellsworth; fleet captain, Lawrence B. Getchell, Southwest Harbor; fleet surgeon, Dr. Arthur H. Parcher, Ellsworth.

In so far as possible, the club will continue its activities in Union River Bay this season, with some talk of trying to resuscitate the "O" Class of 18′ centerboarders to take up the slack in power boating, the latter type constituting the bulk of the club's fleet.

▶ Starting a schedule calling for the launching of four vessels totaling approximately 2000 tons in April, the Camden Shipbuilding and Marine Railway Co. put *Pine Tree II*, second of five 194′ wooden barges building there, into the water on April 7th.

The Camden yard (one of Maine's biggest) has added a five-room hospital and infirmary to its plant. The building is located near the main gate. It includes a waiting room and first aid surgery with modern equipment. The yard has generously made these facilities available to the public at certain hours.

▶ The Down East yachting outlook for summer appears noticeably brighter than a year ago. After spending last summer on the beach watching the fun of those who went ahead and sailed regardless, a lot of yachtsmen are inclined not to miss the fun this year. Complete, preseason clarification of wartime sailing regulations is proving a big help in making up minds that were perplexed on those points during fitting out time last spring. There may be little long distance cruising but local sailing will fill that gap and more.

▶ Launchings at the Deer Isle-Stonington Yacht Basin in March included the 114′ Army transport *FP63* and the 70′ dragger *Elin B*, built for Capt. Edward Billings, the Basin's general manager. The latter craft will be skippered by Captain John Wentworth of Vinalhaven.

Soon after the launching of *FP36*, the keel of a 140′ Army Transport was stretched on the ways. The Basin will build two of that type besides continuing to produce the 114-footers.

▶ Most skippers of tall sparred (over 80′) boats, whose favorite pre-war cruising haunts lay east of Cape Elizabeth, will recall the heated controversy on the subject of clearance under the Deer Isle Bridge over Eggemoggin Reach, when building that structure was under contemplation.

Anyway, the bridge was built and it doesn't seem to have been any barrier to cruising, especially since the trend toward smaller boats got under way. But, how *near* it came to being a barrier as the result of that December gale, reported here previously, may be indicated by the list of material sought to bolster the structure: 25,000 lbs. structural steel; 11,000 ft. of 1⅛″ strands, 1,650 ft. of 1″ bridge cable; and 15,800 lbs. of cast steel cable bands.

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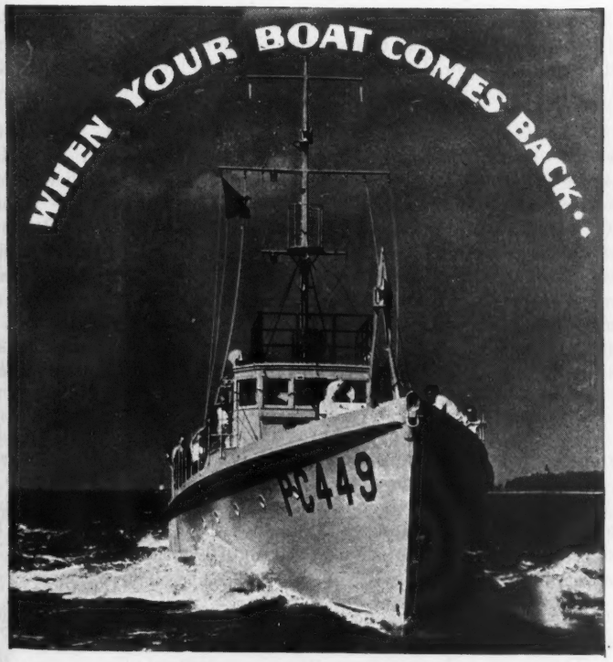

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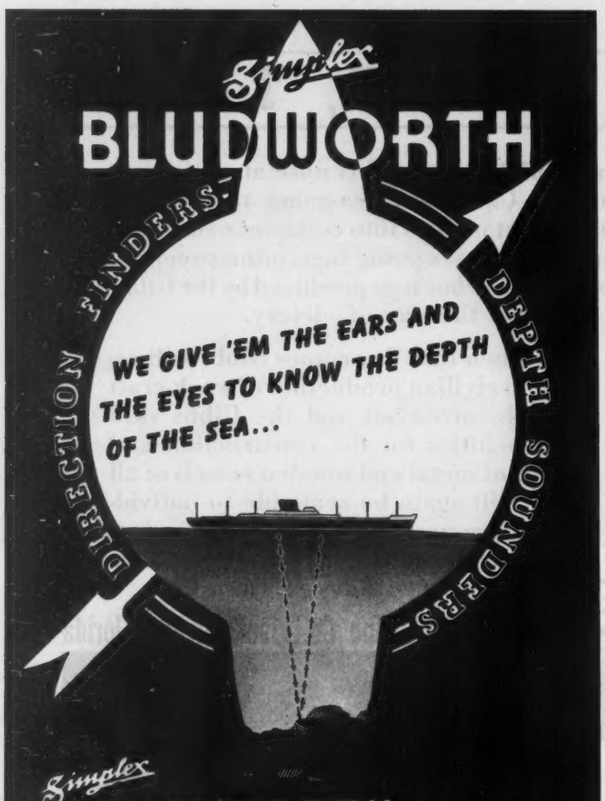

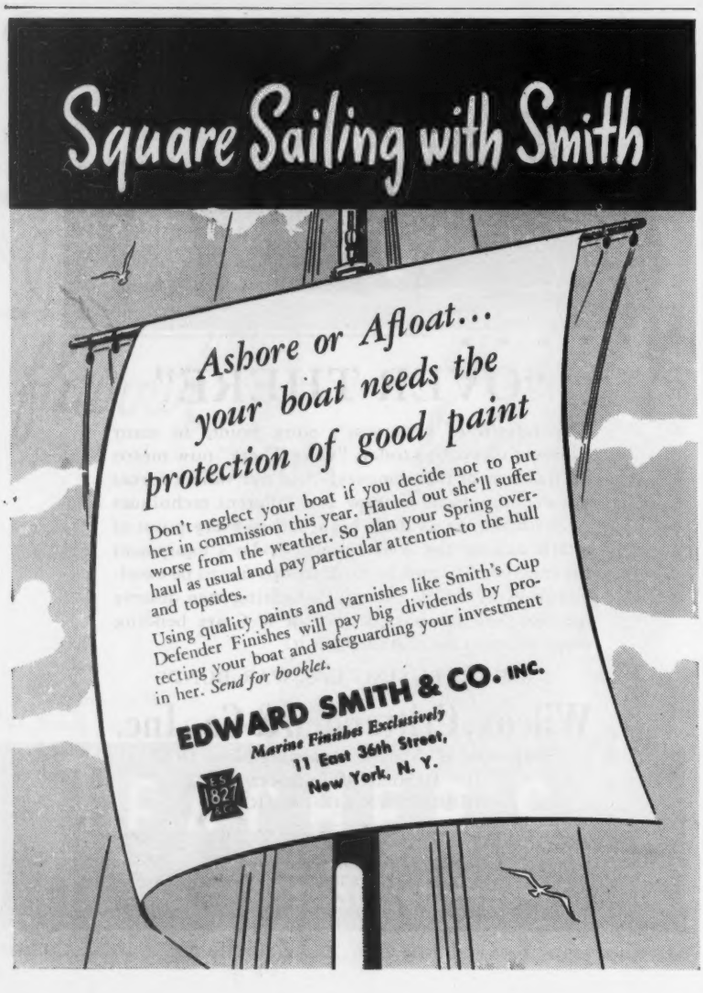
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This nautical sign greets the visitor to the Sandusky Sailing Club

THE SOUTH SHORE OF LAKE ERIE

By John G. Robinson

▶ The annual spring meeting of the Inter Lake Y.A., on April 3rd in Cleveland, was the feature event of the pre-fitting out season on the South Shore.

It was a representative gathering of well-known yachtsmen from the 45 member clubs of the Inter Lake to make plans for the annual regatta scheduled for Put-in-Bay August 8th–11th. Commodore Milton N. Gallup presided, assisted by Vice Commodore Joseph F. Nagle, Rear Commodore James A. Beidler and Secretary-Treasurer Harry C. Kendall.

Reports indicate that practically all the Lake Erie classics, such as the Roberts Memorial Trophy, the Mills Trophy, the Falcon Trophy and the annual Blue Water races, will be scheduled as usual, although some owners may have difficulty in obtaining crews.

The nominating committee to select officers for 1944 was elected as follows: Earl Seitz, Sandusky Y.C.; Francis Martin, Edison B.C., Al. Mastics, Cleveland Y.C., and Al. Wakefield, Vermilion B.C.

▶ The Edgewater Y.C., of Cleveland, is spending approximately $6,000 on new piling and docks this spring. The improvements will give much better protection for the boats in the new small boat basin. A derrick will be erected just north of the clubhouse for the convenience of the members.

▶ Ernest A. Brooker, proprietor of Yacht Terminals Inc., Cleveland, left for Great Lakes, Ill., the last week in March, for naval training. In his absence the boat yard will be under the management of William Froning, who has been Brooker's assistant. . . . Jack Shepherd, of the Vermilion B.C., who took third place in the National One-Design Class at Put-in-Bay last summer, has been honorably discharged from the Coast Guard Reserve, after serving on active duty on the East Coast. He has joined the Army. . . . S. L. Traub, of the Cleveland Y.C., has sold his 35′ a.c.f. cruiser *Taio* to Vice Commodore Elmer Jones, of the Edgewater Y.C. . . . The Catawba Cliff Beach Club, which has one of the most beautiful small boat harbors on Lake Erie, about six miles east of Port Clinton, has leased its clubhouse for the duration to the Standard Products Co.

▶ At the annual meeting of the Forest City Y.C., of Cleveland, the following officers were elected: Commodore, E. G. Quellhorst; vice commodore, H. Squires; rear commodore, E. W. Weir; fleet captain, O. J. Doyle, and J. W. Vandenbusch, secretary-treasurer. The new commodore is active in the U. S. Coast Guard Reserve (T), as lieut., j.g., and has recently been assigned additional duties as Vice Captain of Division No. 6 of the Coast Guard Auxiliary.

▶ Commodore John Schmauch, of the Lorain Y.C., has been appointed chairman of the War Time Emergency Stand By Committee of the I.L. Y.A. The idea is to have a committee of experienced officials ready to fill in on other committees should their services be required at next summer's regattas. Owing to the general uncertainty of attendance under present conditions, it seems an excellent idea. . . . C. E. Heil, of the Cleveland Y.C., has bought the 26′ cruiser *Marelvi* from Irving J. Cassidy, now a major in the Army Air Force at Washington. . . . Don Heisner, of the Lorain Y.C., has bought an Alden-designed Coastwise Cruiser through the office of John G. Alden, of Boston. The boat, now in storage at Olcott, N. Y., will be brought to her new home port as soon as weather permits. . . . Hugh E. White, of the Cleveland Y.C., has sold his auxiliary yawl *White King* to H. J. Stanley, of Shaker Heights, O.

▶ The Race Committee of the Mentor Harbor Y.C. for the season of 1943 will consist of Dick Newpher, chairman; Howard Morris, vice chairman, and one representative from each fleet as follows: Stan. Gridley, Lightnings; Lester Sears, auxiliaries; Hal Kneen, G. L. 21's; Bob Cornell, Interlakes and Bob Wilson, Snipes.

▶ The Erie Y.C., Erie, Pa., is enlarging its boat harbor this spring. The old harbor entrance was too narrow to allow a dredge to enter and the harbor was too shallow for any but light draft boats. . . . The Lakeside Y.C., of Cleveland, is operating its weather station again this year and storm warnings will fly from the club's flagstaff on the outer wall of the boat basin.

FLORIDA TRADE WINDS

By Vivyan Hall

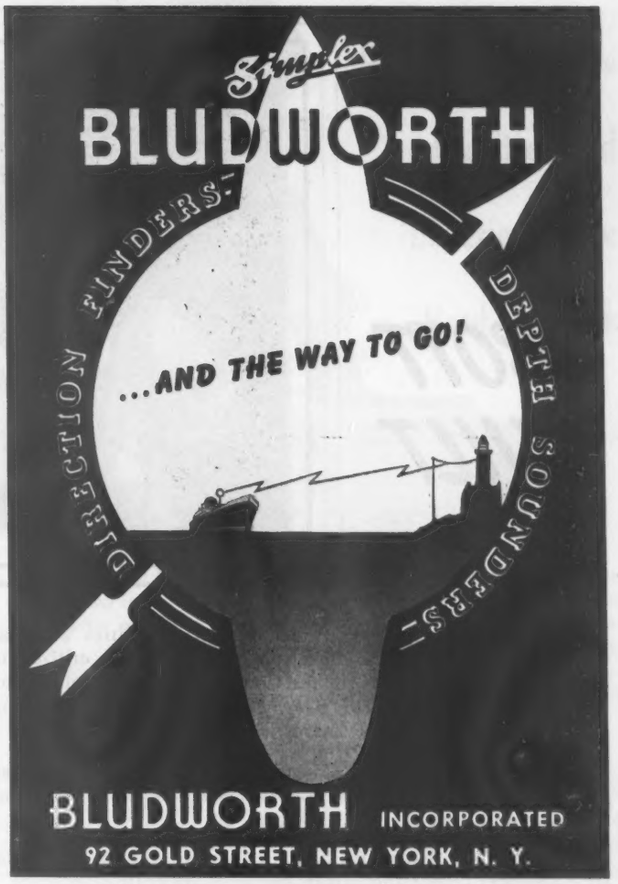
▶ The commander of the Cuban Navy is Commodore Julio D. Arguelles, an active member of the Habana Y.C., who has won motor boat races with his runabout *Flash*. He came to Miami in March to receive a group of ten patrol boats for use against submarines. With ceremonies which were broadcast to Cuba, the boats were officially presented by Captain H. H. J. Benson, U.S.N., acting commander of the Gulf Sea Frontier. The boats were some of the 83-footers recently built for the Coast Guard and turned over under lend-lease. Officers and crews were instructed at the Sub Chaser Training Center before taking the ships to their new stations. As an expression of good will, they gave a large Cuban ensign to Commander E. F. McDaniel and the school.

▶ The Prigg Boat Works has just moved into a new 250′ by 200′ building on the Miami River where they are busy on service boats for the air forces. They are also building 65 of the 16′ air driven swamp rescue boats which are powered with Lycoming aeroplane motors and which draw a bare 3″. Such boats have been found useful at both Army and Navy training stations, particularly where there is marshy land nearby. Lew Hewes, whose former outboard establishment on the bay front was squeezed out by Navy expansion, has also moved up the river. Forest Johnson recently delivered three fast 30′ twin screw motor cruisers to the Navy at Key West and has two more almost completed. Private construction here includes a 22-footer for Francis Morris, of Miami, and a 24′ Prowler. The Sanford Boat Works, on the St. Johns River, suffered damage estimated at $5000 during a recent wind storm.

▶ On the 20th anniversary of its establishment in Miami the Merrill-Stevens Dry Dock Co. was awarded the Army-Navy "E" for excellent work in the conversion and repair of vessels for the war. This is reported as the first shipyard receiving the honor for repairs rather than for production. During a recent emergency, the force put in several 84-hour weeks to get certain ships back to their patrol duties. Among the yachts which the yard has converted to fighting ships are: Marion Bush's *Coronet*, which is now the U.S.S. *Opal;* Leo Spitz' *Caroline*, now *YP-98;* Sinclair G. Stanley's *Seventeen*, now U.S.S. *Cornelian;* and two auxiliary schooners: Dr. Mathew Mellon's *Gerda* and Charles E. Sorenson's *Icaros*.

▶ The Miami Shipbuilding Co., which won the first "E" in south Florida, continues to expand. It is building a foundry in Coral Gables and a larger machine shop at the plant on the Miami River. Further up the river, the Marine Construction Co., and the Heath and Mann Construction Co. have both been awarded contracts for twelve wooden barges to help in the oil transportation problem. They are 169′ long, cost about $65,000 each, and will release steel barges for the actual carriage of oil. The Marine Construction Co. is a combination of two old time boatbuilders, George B. Gibbs, of Jacksonville, and M. R. Harrison, Jr., of Miami. The former's Gibbs Gas Engine Co. is going ahead building mine sweepers for the Navy.

▶ The Nassau Y.C. is keeping up an active schedule of sailing with P. S. Clark as chairman of the race committee. The Star Class series for the Marigny Trophy was won in the final race by Alfred De Marigny with his *Concubine*. R. T. Symonette's *Nassau Star*, with a five-point lead, lost her rudder when high winds disabled two other boats and finally landed in a third place tie with Chris Brown's *Typhoon*. Second in the series was Durward Knowles' *Margie B*. In the eight-race series for the Flamingo Class, Basil McKinney's *C Me Go* took the Brooks-Scanlon Trophy. Bert Kelly's *Gem* finished second and Donald Brown's *Butts* third. Team races with the Royal Nassau S.C. are planned for April. At Sarasota, the Sailing Squadron keeps right on with Sunday races. Billy Hebb's *Gelu* and John McKeehan's *Jezebel* continue to fight it out for first place while Bruce Chadwick's *Jasper* follows close in third position. Still in the running are Thornton Comb's *Runt*. John Pelote's *No-Name* and Louis Bernick's *Poco*.



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COMET COMMENTS

By Malcolm D. Lamborne, Jr.

▶ The first report of plans to hold a district championship, in absence of a national regatta this year, has been received from Regional Vice President Ed Merrill. He says that the Delaware River Y.R.A. is considering recognizing a district champion based on the results of inter-club regattas during the coming season. It is the hope of the Comet Class Y.R.A. that many other regions will make plans for such events.

▶ Executive Vice President Rodney T. Bonsall, who is also editor of the Class handbook, reports that the 1943 supplement is about completed and should be sent out to the membership in the near future. There will be no regular edition of the handbook this year; the supplement will contain all the latest developments. It is to be in mimeographed form. . . . Arthur Miller of New Rochelle, N. Y., new secretary of the Echo Bay Comet Fleet, promises National Secretary Joe Fernandes increased membership.

▶ The Potomac River Comet Fleet has a new captain. He is Lt. Ed Braddock, USNR, former regional vice president for South Jersey and Pennsylvania. Braddock has been sailing at Washington for the past year. He succeeds Clarke Daniel, skipper of the fast *Robert E. Lee*. Nora Lamborne has been reëlected fleet secretary, and Clyde Cruit appointed measurer for the Washington area. . . . With Comet racing beginning this month in the Capital, the fleet was welcoming several newcomers. They include R. H. Davies, of the British Air Commission; Robert Meecheam, of the Navy Department; and Henry Leeds. Davies becomes the third British subject to join the Washington fleet. Others are W. R. A. Breare and Kenneth Clarke.

▶ Ralph E. Walsh, of Long Branch, N. J., writes Secretary Fernandes that his brother's enthusiasm for Comets has not been dampened despite the fact he's on one of the fighting fronts. He has written home for the latest copy of the Comet handbook and says he's looking forward to the day when he will be racing again with the Shrewsbury Sailing Club. . . . The Secretary has also heard from a soldier stationed "in the flats of Illinois" who wanted two requests filled. One was the address of YACHTING in order to get a subscription and the other was for designs of the Comet. Apparently he has found himself a pond to sail in out in the Illinois flats.

LAKE MICHIGAN BREEZES

By Warren T. Davis

▶ In 1936, twelve men started a yacht club in that city of fame for its steel mills — Gary, Indiana. Here large freighters from the North unload their great loads of iron ore. In 1937, the club was incorporated under the name of the Gary Boat Club, Inc. By 1943, the membership had increased to 120. That is ten fold in seven years. In the process, the club freed itself entirely from debt and now owns a one-story frame building, located at the mouth of the Burns Waterway, on the shore of Lake Michigan. Due to the conditions of the harbor entrance, only shoal draft boats can enter. Perhaps other clubs have their own equipment for dredging channels but here is a club with a sand pump. It seems that the channel is constantly filling with sand because of its location and periodically the old sand pump goes to work. As if that weren't enough of a problem, the club had to have a water taxi in the early days to take members from U. S. Highway 12, down Burns Waterway to the clubhouse. Besides building a clubhouse and having a constant job keeping the harbor open, this gang went to work and built its own road.

Theodore Koeing, commodore for 1943, reports that 18 sail boats and 26 power boats make up the fleet. Earl Graham and Thurston Ward are vice and rear commodores, respectively, while Paul West is treasurer and William Benoit is secretary. Because of the harbor conditions, only centerboard sail boats are used here and Sea Gulls and Comets predominate. Luther Crocker, a power boatman, donated a cup for which the sail boats contest on a point basis for the season. For 1942, Roland Peterson and Anthony Lucas tied for the cup. The power men have contests on Regatta Day and usually take a two weeks' cruise down the Illinois Waterway.

▶ In numerous areas of the lake, the C. G. Auxiliary has been active for a long time. Now the C. G. Temporary Reserve idea has taken hold and large numbers of men with boating experience are in training for part time work. The enlistment calls for a maximum of 24 hours a week, active duty, if called. Volunteers are sworn in and have, on active duty, the same obligations as men in the regular service. A twelve weeks required course covers the initial training, which has been under the direction of Chief Training Officers, appointed by the Flotilla Commanders. Many of the reservists are now on active duty. These men are granted ratings based on their experience. Among the many training officers are: D. E. Hobelman, Chi-

cago Corinthian Y.C.; Henry Smielding, Racine Y.C.; Ed Purtell, Milwaukee Y.C.; Otto Stoessel, Columbia Y.C.; John Lauritzen, Jackson Park Y.C.; Walter McGuire, Walter Goettsch, John Heartz, Chicago Y.C.; Leslie Hanson and Robert Parks, Wilmette Y.C.

Joe Howard, of Charlevoix

▶ George Sollitt, of the mighty laugh, and Phil Hill, have bought *White Cloud* from Charles F. Sorenson of Detroit. Sollitt sold his cutter *Nisswa* to Harry C. McCluskey, also of the Chicago Y.C. From all reports at the time this is being written, there will be a fair proportion of power boats in commission, considering gas rationing and the number that are in government service. It looks as though the turnout of sail will be large. Perhaps there won't be so much time as previously for the sport but most of the regularly scheduled races should be pretty well contested.

▶ Cap'n Joe Howard, one-man greeter and fixer-upper, is a figure well known to yachtsmen visiting Charlevoix's enchanting harbor on Michigan's west coast. A ready grin and a genuine eagerness to serve have won him innumerable friends.

"Whenever we head in here," comments Lynn Rountree, owner of the 92′ *Marlyn* of Chicago and Michigan City, stopping to refuel on a southbound run from Mackinaw, "Cap'n Howard seems to know we're coming. He's silhouetted against the lake just outside his office by the time *Marlyn* enters the channel and toots for the bridge to swing open. He wears a contagious smile, remembers everyone, and is genuinely happy to welcome a visitor back."

As Charlevoix's harbormaster, Joe holds forth in his immaculate little office on the Municipal Dock, at the entrance of Round Lake, the town's sheltered harbor. Green terraces, sloping from the city's main street down to a waterfront lined with neat slips, are a prospect to delight the yachtsman. Joe is intensely proud of his domain and looks upon himself as a sort of benevolent monarch.

Cap'n Howard came to Charlevoix 36 years ago, after 14 years' service as a sailor on the Great Lakes. Privately, he confesses to 64 years of age but, when questioned by visitors, is quite likely to drop as much as ten years — an error never suspected because of his jaunty figure and disarming grin.

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ON COLLEGE CHARTS

By Leonard M. Fowle

▶ Although at first thought the times might not seem auspicious for launching a brand new championship, the Inter-Collegiate Yacht Racing Association may possibly branch out during the coming summer with an intercollegiate title series in Stars.

The idea has been broached in the past but laid aside for future consideration; and college Star competition has been limited to a few dual and triangular meets sponsored by the Coast Guard Academy. Recently a group of Star sailors in the Naval Academy's Midshipmen's Boat Club have become interested in intercollegiate competition in this type of boat.

Under present circumstances, the Y.R.A.'s spring racing schedule is too full to add another event, but a Star Class championship in the summer should be possible. With the fleets at the Coast Guard and Naval Academies, it should be possible to hold eliminations at New London and Annapolis to select six or eight finalists for a championship series some weekend in July or August.

▶ Some college yacht clubs seem to get all the bad breaks of wartime conditions while others are more or less untouched by the loss of key officers and skippers. During the last year, the war caused Princeton to change its senior flag officer six times; now Yale has outdone the Tigers with four commodores in as many months. In early December, Dick Besse, graduating that month, retired in favor of Jack Weitzel, who was called for Army Air Corps duty a couple of months later. He was succeeded by Wilmot V.

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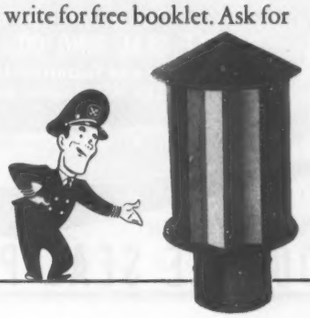

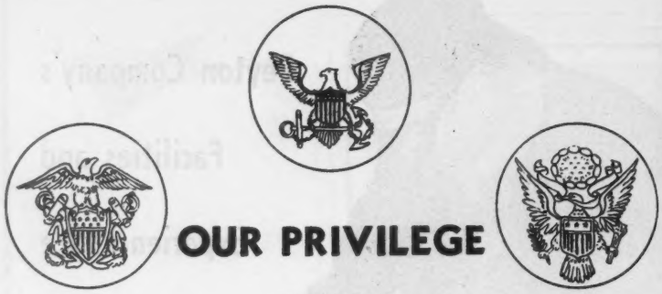

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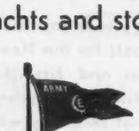

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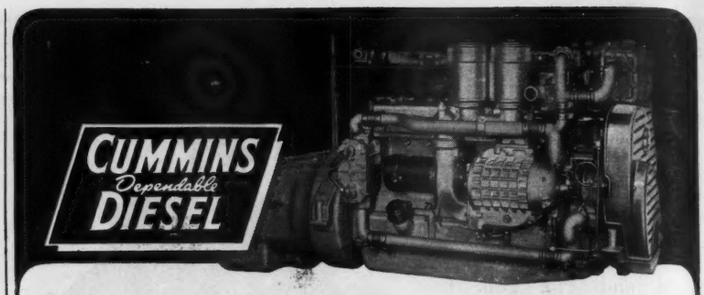

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Castle, Jr., but, just one day later, Castle received his orders to report to the Army. That evening, L. Clifford Lewis, Jr., of Philadelphia, was elected Yale's third commodore within 24 hours.

▶ Any belief that the loss of Dick Besse was going to cripple the Yale sailing team was dispelled when the Eli sailors, in a hard breeze defeated Coast Guard, 88–57, in the opening match on the Thames River, April 4th. Cliff Lewis was high scorer but the other Yale skippers, Gerald Daly, of Stamford, George Hall, of Newport Harbor, California; and Donald McCullough, another Stamford product, sailing the Coast Guard dinghies for the first time, outshone the home skippers.

▶ Several intercollegiate skippers of recent vintage have been in the news the past month. . . . Lieut. Thomas T. Crowley, 1941–42 I.C.Y.R.A., president, was cited in dispatches of the Chicago Daily News Service for his fine job of clearing mine fields when the Americans retook Gafsa. . . . Irwin W. ("Chip") Tyson, old Cornell ace, was awarded the watch presented for excellence in damage control by the officers of Columbia's Midshipmen's School, when he was commissioned early in April. . . . Tyson's old running mate (another ex-I.C.Y.R.A. president), Dick Bertram, writes from the Virgin Islands that he is working at the naval base on St. Thomas and using his Alden cutter *Sora* as a houseboat. . . . One of Dick's predecessors at the head of the I.C.Y.R.A., William B. Cudahy, of Harvard, is a lieutenant (j.g.) in the Coast Guard.

NARRAGANSETT BAY GOSSIP

By Jeff Davis (Old Doc)

▶ As I sit writing this compendium of valuable information, it dawns upon me that the only folks in the Narragansett Bay area who believe that "Spring has come" are those who look in the Almanac to find when it's time to take off their heavy ones, and believe all they read.

And, speaking about fitting out, meaning burning and scraping paint and varnish before renewing it, the wise boat owner who's reasonably healthy will win a bet if he gets some paint and brushes and tackles the painting job himself. With a shipyard, where almost anyone who can crawl can get a job for from a dollar to a dollar and a half an hour and plenty of overtime at time and a half, not only do the owners of the small yards — and it's only the small yards that hauled yachts last fall — find it impossible to hire men who know anything about boats but it's a strong temptation to the yard owner himself to go where he is sure to get a pay envelope every week without having to send a bill.

▶ Harvey Flint who, with his brother Dutee, made history in Narragansett Bay and elsewhere with a succession of *Wanderers* years ago, says he has gone back three feet since he was eight years old. When he was that tender age, his father bought him a 15′ skiff with a sail. Now he has just bought himself a 12-footer to use for fishing and gunning next fall. His last boat was the 64′ over all Mower-designed schooner *Wanderer IX*.

▶ Arthur W. Suddard, of Edgewood, has bought Harris Squibb's sloop *Sally* and renamed her *Dart*. . . . A. Livingston Kelly has sold his sloop *Timaru* to H. J. Saalwachter, of Portland. Harold A. Green, of East Greenwich, has bought William Tefft's cruiser *Marguerite*. . . . Commodore F. Herbert Smith, of the State Council of Defense Evacuation fleet, has sold his cruiser *Welcome* to Claire LeFaver, of Providence. . . . Although the Narragansett Bay Fleet of the International Star Class Y.R.A. has been dormant since 1941, it has a new associate member, the youngest, probably, in the entire association. He is Samuel J. Korper, 54 weeks old when his name was added to the roster. Only son of George Korper who

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used to sail in the Western Long Island Sound Fleet before business changes brought him to Rhode Island. . . . Judge Henry E. Crowe, who sold the New Bedford 35 *Crowsnest* last fall and bought the auxiliary ketch *Priscilla M* somewhere in Maine, brought her down the coast the latter part of March and has her tied up at Web Knight's wharf at Pawtuxet Cove. . . . Dr. George W. VanBenschoten, whose cruiser *Day Dream* was loaned to the Coast Guard, has bought the 39′ twin screw Wheeler cruiser *Kiowa* from Wesley Grant, of Cedarhurst, N. Y. . . . Walter Myers has sold his glass cabin cruiser *Seagull* to Clarence Hackerson.

LONG ISLAND SOUNDINGS

By Starboard Tack

▶ *News from the Clubs:* Flotilla 602 of the Coast Guard Auxiliary and the Larchmont Y.C. joined hands to put on a bang-up party to contribute funds for the Red Cross. To be exact, they raised no less than $598.50 — an impressive sum. . . . The New York Y.C. is quite a lively place these days, for hardly a week goes by without half a dozen meetings in connection with some kind of defense activity. Commodore Roosevelt's leadership in furthering such activities is to be applauded. . . . Thirty enthusiastic yachtsmen, most of them of the Riverside Y.C. Lightning fleet, attended the Club's annual "Sailors Dinner" early in March. At the conclusion of the festivities, the Riverside Lightning Association elected Ted Helprin as fleet captain, Henry Scholtz as fleet secretary and Dehaven Ross, treasurer. Rear Commodore Gray reports that the club will "be very much in commission this coming season." . . . The Huntington Y.C. goes into commission on May 22nd and the regatta committee has scheduled the following races: Spring Race, Sunday, May 30th; Fifth Annual Huntington Race, July 25th; Fall Race, Sunday, September 5th. Flag officers for the year are: William T. Delvin, commodore; Leslie G. Baylis, vice commodore; Robert L. Hall, rear commodore and Milton C. Bergey, fleet captain.

▶ The Knickerbocker Y.C. will open toward the end of May and the racing members anticipate active participation in the L.I.S.Y.R.A. The new slate is: A. S. Griffiths, commodore; John J. Warsaw, vice commodore; Maurice Stolzman, rear commodore; John G. Honey, secretary and George Gilchrist, treasurer. . . . The Spring Dinner of The Rocking Chair Fleet, Porch No. 1, will be held at the Harlem Y.C. on Saturday, April 17th. . . . The City Island Y.C. has its first gala of the season the same date, and has scheduled May 22nd for the opening of the season. . . . The Morris Y.&B.C. is inaugurating an active program of inter-club racing, with particular emphasis on junior participation. Four Bay and Sound races are now scheduled, and others are reported to be on the fire. . . . New officers of the Morrisania Y.C. are: Al Baurley, commodore; Jack Scheers, vice commodore and Herb Davis, rear commodore. . . . Yachting activities at the Thames Y.C. will be somewhat limited as a result of the rigid restrictions on local waters, but the club is going to be much in commission just the same. O. K. Osmond is the new commodore; J. A. Connor is vice commodore; W. W. Meek, rear commodore; H. P. O'Neill, secretary; M. J. DeVito, treasurer and C. W. Thurber, measurer . . . and, as a cheery note for cruisers, the Milford Y.C. will reopen on May 22nd.

▶ *Fleet Report:* No less than fourteen classes have made application to the L.I.S.Y.R.A. for starting times in the forthcoming championship series. The S Class, the Atlantics and the Internationals will be much in evidence this season. Speaking of the latter, no less than nineteen boats will hit the line on the opening race on May 9th. The first Sparkman series will be sailed on May 16th and 17th. . . . The Handicap Class is also planning an active season, although there is talk of combining starts of some divisions.

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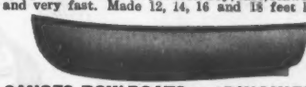

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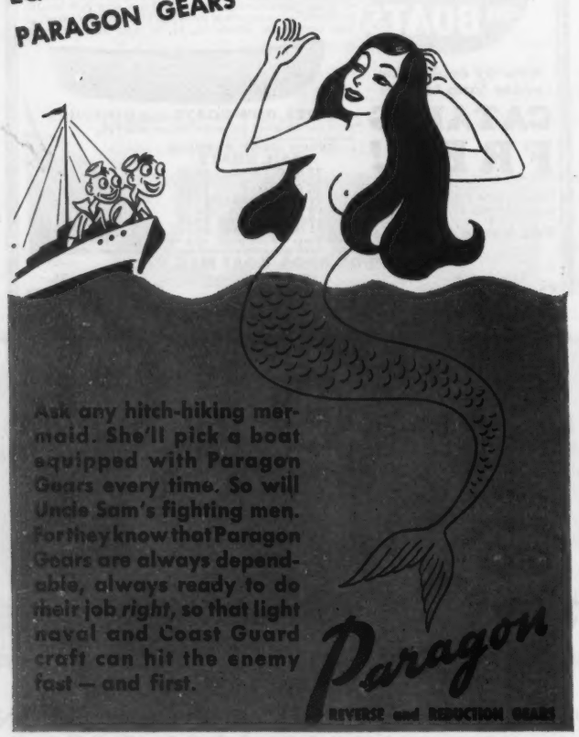
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DETROIT JOTTINGS

By George E. Van

▶ There's a crew shortage here. Skippers were acting like college coaches going after all-state football material as soon as the Detroit River Y.A., through its new commodore E. C. Balch, of the Detroit B.C., announced the season's schedule with all the usual fixtures. Some of the old boys who, properly, haven't been out of a cockpit to play on the pointed part of a ship in years, are in great demand.

"Toot" Gmeiner for instance, who cleaned up last summer with *Apache*, a New York "32," was looking for someone to replace Norbert Taylor who is somewhere out on the blue. His approach was typical. He needed a light canvas man. "Lookit," he'd say, "you can have your choice of lee bunks, there'll aways be beer in the ice box, I'll have you a private jug for your very own and you won't have to come on deck when we're on the wind." Little wonder, then, that such sought after "old timers" as Clem Carter, George Hendrie, Herman Petzold, Carl Meurer, Les Nevins, Leonard Jerome, Bob Kerr and Lew Haskins, to list a few notables, are going around puffed out like parachutes with their new importance.

▶ "Cap" Ross, at Edison, and Doc Ament, at the Detroit Y.C., had their cat boat fleets ready for racing the last week in April and Harry C. Kendall, perennial chairman of the D.Y.C. race group, is getting everything organized for the first Inter-club racing on Lake St. Clair on Memorial Day, just as usual.

▶ Local yachting got a thump in the transom when George Sollitt and Phil Hill sneaked over here from Chicago and bought *White Cloud*.

There was some compensation for *White Cloud's* loss in the announcement that George Gonyeau was trying to truck out *Armida*, a Paine "Eight" from Salem, Mass., where he bought her from Wm. T. Aldrich.

▶ The Crescent S.Y.C., that dandy little seagoing outfit out on Lake St. Clair, is adapting its activities to the times. All the club's metal moorings have been yanked up and replaced by concrete blocks. Every member can get to the club, 12 miles out of town, with his "A" book. Each section of the city is split up, each has a section captain. You call the captain to find out who is going to the club. Club dinners are potluck affairs. Each member brings a certain food. Talmon Davenport is commodore.

LAKE ONTARIO NEWS

By W. Peck Farley

▶ There are over 360 members of the Royal Canadian Y.C. in active service. A number of yachts are, consequently, not in commission for sailing during the summer. They look awfully lonesome, bobbing away at their moorings with no spars stepped, patiently waiting for their owners who are absent on active service or too busy with war work to have any time for sailing, just like faithful old dogs awaiting the return of their masters. The yachts that are in commission, however, do the best they can to carry on. Nearly every yacht carries ladies as regular members of the crew. Racing is, of course, greatly curtailed but the club is planning four open regattas of an informal nature and also scratch races one evening a week.

The Junior Club is doing a magnificent job with an average daily attendance during the summer months of nearly 100. They are proud of the fact that a large percentage of the members holding commissions in the Navy are graduates of the Junior Club.

▶ The New York State Snipe Association held its annual meeting and banquet in Rochester March 27th. There was a fairly good representation of western New York clubs, including Olcott, Loon Lake, Onondaga, Canandaigua, Newport and Nine Mile Point. The association is planning only one regatta for this summer, the N. Y. State Club Championship with two boats from each member club participating. This is to be held this year at the Newport Y.C., on Irondequoit Bay. The date has been tentatively set for July 3rd and 4th. The contestants will probably sail in local Snipes, bringing their own canvas with them.

The following officers were elected for the current season: Vincent Hall, Canandaigua Y.C., commodore; Dick Parshall, Onondaga Y.C., vice commodore; Bill Sweeney, Newport Y.C., secretary and treasurer.

▶ Frank Coleman, of the Newport Y.C., reports that some of the hardier souls have been making the trek to the club Sundays to work on their boats — scraping paint, he says. With Rochester weather what its been, it's more likely ice they were vigorously sanding off. . . . Dick Dasson has joined the ever-increasing number of Newporters in active Service.

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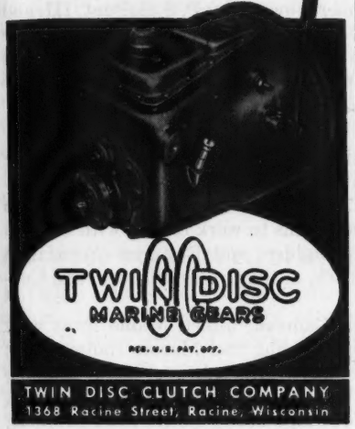

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▶ The Algonquin Y.C. boasts at least four new Lightnings in its fleet this season, some of the boys, including Ed Crane and Bill Straub, having made a purchase from Chaumont Bay.

▶ The usual plans are being laid at the Sodus Bay Y.C. for activities this summer and Commodore Paul Emerson has appointed all his various committees. The club is coöperating with the local Power Squadron in the instruction program for high school boys in the Seamanship Training Corps. The ice went out of Sodus Bay late in March.

▶ Dave Bellamy, of the Rochester Y.C., has sold his sloop *Four Bells* to Charlie Engert. . . . Earl Esty and Al Baird have bought the R boat *Bobcat* from Rufe Dryer. Al chartered the boat from Rufe last summer and found her plenty seaworthy when she was out in a northeast gale for 18 hours. One of the crew of *Bobcat* will be missing this summer; Thelma Young has joined the Waves and is a Petty Officer Specialist in the Navy Photographic Division at Anacostia, D. C. . . .

The highest water in the lake since 1929 has been keeping Greely Strickland, yard superintendent, worried over conditions in the R.Y.C. basin. Some of the docks have been submerged but no great damage was done. Launching is to start April 26th and all the boats to be commissioned will probably be ready by Decoration Day.

CHESAPEAKE BAY ACTIVITIES

By Bugeye Bill

▶ Final drafting of the 1943 regatta calendar of events sanctioned by the Chesapeake Bay Y.R.A. has been completed, and it looks like another big year in these waters, despite war restrictions.

The season opens this month with two events, Maryland Y.C. shakedown race for cruising, racing and Delta Classes on the 23rd, and Gibson Island Y.S. Swan Point-Love Point race on Memorial Day, also for the same three classes. While not sanctioned by the C.B.Y.R.A., the spring series of the Annapolis Y.C. was scheduled to get under way this month, also. Classes include Stars, Hampton One-Designs and Chesapeake 20s.

June will see the first of two races for cruising, racing and Star Divisions under auspices of the Naval Academy Y.S. They race June 6th. The second event sponsored by Navy will be held August 28th. The Academy will donate trophies. The series last year was quite successful and marked the first time the Navy played host to Bay yachtsmen.

Among regattas attractive to small boat sailors are the Maryland Y.C., June 5th and 6th; Baltimore Y.C., June 12th and 13th; Fairhaven S.C., June 26th and 27th; Rock Hall Y.C., July 3rd and 4th; Annapolis Y.C., July 10th and 11th; Miles River Y.C., August 6th and 7th; Tred Avon Y.C. and Chesapeake Bay Y.C., August 13th through 15th; Indian Landing B.C., August 28th and 29th; West River S.C., September 5th and 6th, and Elk River Y.C., September 11th and 12th.

▶ The spring series of the Potomac River S.A. was to open this month, with plans projected for a number of new courses and more races. In the past, all classes sailed a single race a Sunday. It is now planned to hold two races for Comets, three races for Penguins, one or more races for the Chesapeake 20s and a single event for the Handicap Class, each week.

▶ Speaking of sailing interest in this area, Harold Loweree, C.B.Y.R.A. secretary-treasurer, has sent out questionnaires to Bay yachtsmen asking what their plans are for the season. Replies to date have come mostly from owners of the bigger boats, and they indicate they will be out again in good numbers. . . . The C.B.Y.R.A. Executive Committee met last month in Baltimore and, among other matters, approved a revision of rules affecting the cruising and racing divisions. It amounted to an adaptation of the North American Y.R.U. rules to fit racing conditions found on the Chesapeake. . . . Stanley Trott, C.B.Y.R.A. president, has appointed the following committee chairmen: Bob Wayland, Baltimore, Appeals and Rules; Roger Carson, Baltimore, Records; Tom Carpenter, Oxford, Md., and James J. Faye, Ottoman, Va., co-chairmen, respectively, of the Eastern Shore and Western Shore for the Educational Committee; Malcolm Lamborne, Jr., of Washington, Schedule; and John R. Sherwood, Gibson Island, Nominating. . . . The West River Y.C. has elected the following officers for the year: J. Roy Crockett, commodore; Harry E. Smith, vice commodore; Paul D. Crandall, rear commodore; William Pugh, secretary-treasurer; William O. Baker, fleet captain, and Dr. Valentine Hess, fleet surgeon. This group has its winter headquarters in Washington, but moves over to Galesville, on West River, in the summer.

▶ Under the direction of Cmdr. G. A. Littlefield, Coast Guard Auxiliary flotillas in the Fifth Naval District are being reorganized and inactive members weeded out. Flotillas are active in this area.

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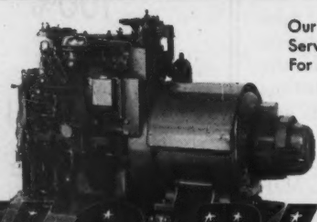

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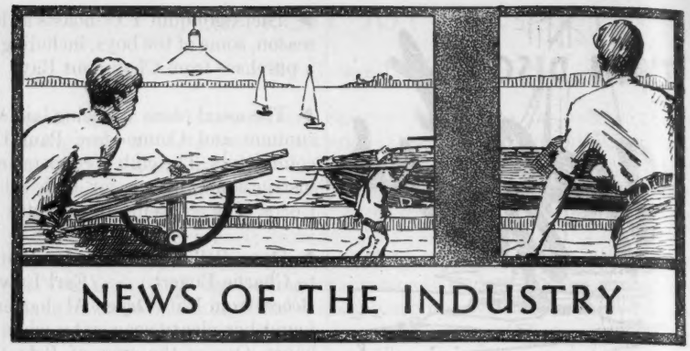
MARINE ELECTRIC PLANTS



COAST GUARD CONSTRUCTION

▶ The Oxford Boatyard Co., Oxford, Md., has been engaged in rebuilding two World War I sub-chasers and converting them to Coast Guard cutters. . . . The Western Pipe & Steel Co., San Pedro, Cal., is the builder of the Coast Guard's new icebreaker *Southwind*. . . . Among the well-known yachts which the Berg Boat Co., of Georgetown, Md., has converted for Coast Guard use are *Barlovento*, formerly owned by P. S. duPont, III, and Eugene E. duPont's *High Tide*. . . . Jakobson Shipyard, Inc., of Oyster Bay, N. Y., was responsible for the fitting out of *Serva La Bari* and *Jane Dore*, two well-known yachts now in Coast Guard service.

NEW MAINE ASSOCIATION

▶ An announcement recently made in Camden tells of the formation of the Maine Boat Builders and Repairers Association for the purpose of furthering the best interests of Maine's builders of wooden vessels. To help achieve that purpose, the Association plans to work closely with the also newly formed Atlantic Coast Boat Builders and Repairers Association which is headed by Marshall E. Tulloch, of the Greenport Basin and Construction Co., at Greenport, L. I.

At the organizational meeting in Camden, fifteen Maine firms were represented. They are: Camden Shipbuilding and Marine Railway Co.; Southwest Boat Corp.; Frank L. Sample, Jr., Inc.; Bristol Yacht Building Co.; Belfast Shipbuilding Corp.; Webber Cove Boat Yard; Harry G. Marr; S. B. Norton & Son; Waldoboro Shipbuilding Corp.; Reed Brothers; Gray Boats; Stonington-Deer Isle Yacht Basin; Snow Shipyard, Inc.; Hodgdon Bros.-Goudy & Stevens; Mt. Desert Boat Yard, Inc. Officers elected are: President, Richard V. R. Lyman of the Camden Shipbuilding & Marine Railway Co; vice president for the Western District, Frank L. Sample of Frank L. Sample, Jr., Inc.; vice president for the Eastern District, Henry R. Hinckley of the Southwest Boat Corp.; secretary-treasurer, Charles Smith of the aforementioned Camden yard.

ON THE PRODUCTION LINE

▶ As a prelude to the award of the third successive Army-Navy "E" to the Gibbs Gas Engine Co., of Florida, George W. Gibbs, one of Florida's pioneer shipbuilders, was the guest of honor of a testimonial banquet given him by a group of Jacksonville citizens. . . . The Hall-Scott Motor Car Co., has been notified that at the last meeting of the Navy Board for Production awards, a star was officially granted it for its Army-Navy "E" pennant. . . . The highest honor bestowed by the United States Maritime Commission — the "M" flag — was recently presented to the Kelvin & Wilfrid O. White Co., of Boston. . . . The boatbuilding fraternity was shocked to learn of the sudden death of J. W. Peyton on March 2nd. The accomplishments of The Peyton Co. have been among the highwater marks

The Oxford Boatyard Co. has rebuilt two World War sub-chasers for new duties as cutters in the Coast Guard fleet. Here is CGC 336, ex-SC 231. She is powered with two Kermath Sea-Raiders

of West Coast warcraft construction. . . . V. E. McMullen is the newly appointed vice president and general manager of the Cummins Engine Co., while J. D. Allen was appointed assistant sales manager and K. M. Leech assistant service manager.

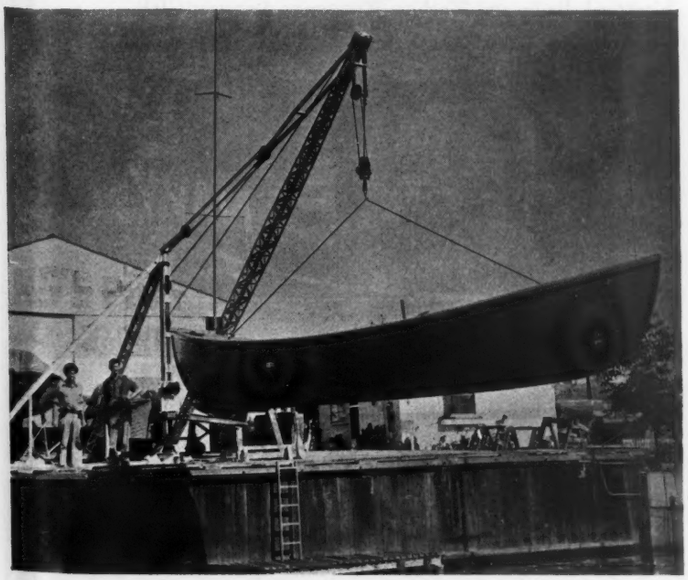
▶ Irwin's Yacht Works, Red Bank, N. J.; Jeffersonville Boat and Machine Co., Jeffersonville, Indiana; The Thomas Laughlin Co., Portland, Maine; and plants No. 1 and 2 (Buffalo, N. Y.) of the Sterling Engine Co. were recent recipients of Army-Navy "E" awards. . . . A second star has been added to the Army-Navy "E" banner flying over the shipyard of the American Car and Foundry Co. . . . To give better service to Pacific Coast users of Everlasting Fastenings, The H. M. Harper Co., Chicago, has opened a factory branch at 210 West 7th St., Los Angeles. C. A. Gauger is in charge. . . . The Armstrong Cork Co. has announced that it has been advised by the War Production Board that all restrictions on the use of corkboard have been removed.

▶ Early in April, at Morris Heights, New York, the Consolidated Shipbuilding Corp. officially hoisted its Navy "E" pennant, with two silver stars affixed, signifying a full year of production excellence since first receiving the honor flag. The occasion also was marked by the launching of another PC escort vessel. Since 1885, the corporation has been an outstanding name in custom shipbuilding. This is the third war in which the corporation has produced craft for the United States Navy. . . . Also in April, at the Elco plant in Bayonne, N. J., another of that company's famous PT boats was christened by Miss Margaret Tynan, an employee of a Brooklyn factory, said to be the only blind girl employed in a war plant on the Eastern seaboard. The Elco plant, which produced nine times as many PT boats in 1942 as it did in 1940, was recently presented with a silver star to add to its "E" pennant.

GAR WOOD PLANT DEVELOPMENTS

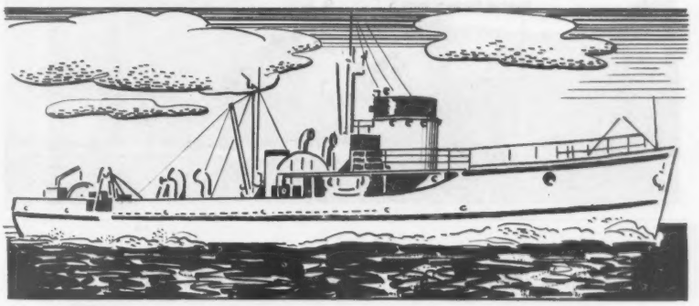
▶ Today Gar Wood Industries, Inc. is composed of six divisions, each manufacturing a wide variety of products and equipment now vitally useful in the winning of the war. Included among the diversified Gar Wood products are gun mounts, barrage balloon winches, wire reels, troop and cargo bodies, mobile machine shop bodies, truck and trailer equipment (such as dump bodies and hydraulic hoists), load-packers, winches, cranes, derricks, refueling tanks and water tanks — road machinery, including scrapers, bulldozers, roadbuilders, tamping rollers and rippers, heating equipment, and boats for the Navy and Army.

In October, 1942, under the direction of the plant superintendent, a machine operators' school was started at Plant 6A. Since then, this school has graduated a large class of formerly untrained men as production machine operators, who are now contributing to the war effort. Each week a new group of graduates will be transferred to production machines to augment Gar Wood's skilled labor personnel. In addition to the inauguration of the school, the established policy of upgrading men from lower skilled to higher skilled machine operations will continue.



Don Petersen's "Viking's Port," Newport, Cal., is busily engaged in constructing 26' drill boats for the Coast Guard. A small crane makes the yard's launchings a simple operation

STADIUM BOATS
1943 MODEL



Stadium Boats, "1943 Model," are mine sweepers — built to Navy specifications for rough, tough jobs. . . . Stadium Boats, "194X Model," will be built for civilian use, built with equal care to give private owners years of service and satisfaction.

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Conserve to Win the War

U. S. Navy Motor Minesweepers YMS1 class and other Navy craft use Joes Reverse and Reduction Gears to conserve materials and prolong the life of power equipment. It pays the owner of diesel craft to practice the same economy by using a smaller engine of less weight with Joes Reverse and Reduction Gears.

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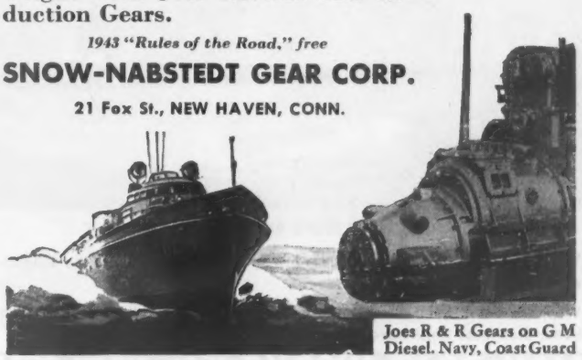
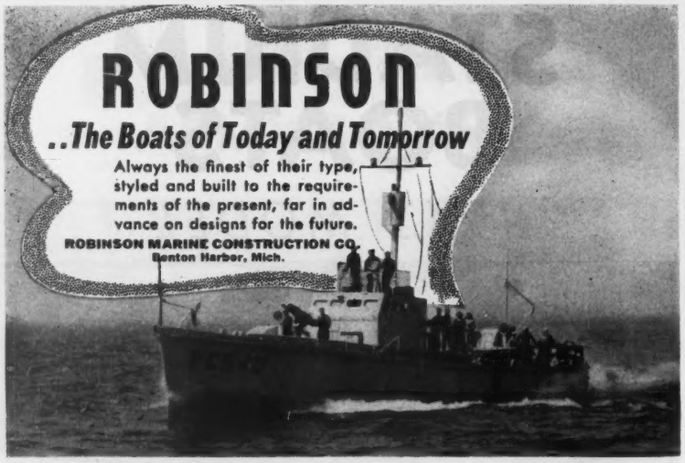


Joes R & R Gears on G M Diesel. Navy, Coast Guard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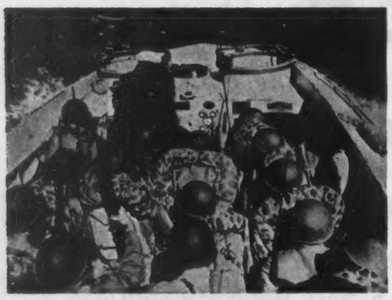
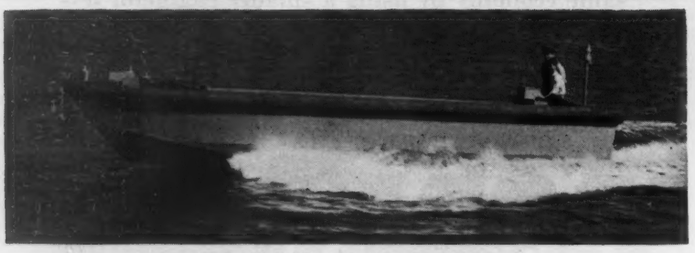
AT TOP SPEED FOR DAYS ON END!



Their Hall-Scott INVADER engines running at top speed for days on end, Hall-Scott powered landing boats poured thousands of troops ashore on the beach heads of North Africa. It is in service like this — *in craft that must not fail, however hard the going*—that the power and stamina of Hall-Scott INVADERS and DEFENDERS is best proved.

HALL-SCOTT MOTOR CAR COMPANY
Division of American Car and Foundry Motors Company, New York, N. Y.



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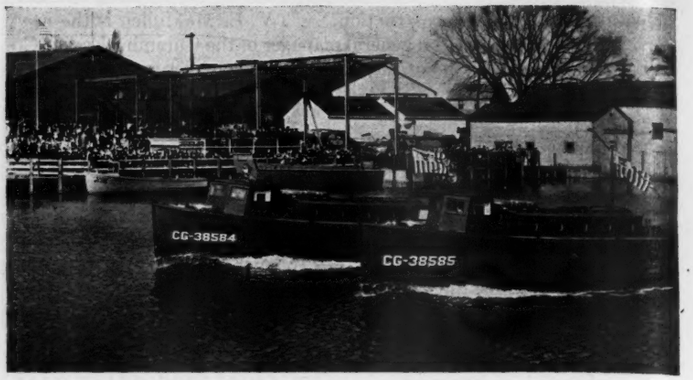

North Tonawanda school children cheer the two Richardson-built Coast Guard Picket Boats which they purchased with $95,000 worth of War Bonds

RICHARDSON RECEIVES ARMY-NAVY "E"

▶ The award of the Army-Navy "E" took a new twist when the Richardson Boat Company, Inc., of North Tonawanda, N. Y., received the coveted honor in joint ceremonies with the school children of that city.

The children's part in the program was occasioned as the result of their buying War Bonds to the tune of $95,000 to purchase Picket Boats for the United States Coast Guard. With an original War Bond goal of $13,500 to purchase one boat, the students, in a whirlwind campaign — fathered by Superintendent of Schools B. A. Leonard — raised more than seven times the amount necessary.

The presentation ceremony marked the culmination of the school children's efforts as Lieutenant Commander Alfred Hansen, naval architect of the U. S. Coast Guard, presented the students with duplicate commemorative plaques; one for their school archives, the other to be mounted on a Coast Guard Picket Boat soon going into active service. Superintendent Leonard accepted the plaques, and the thanks of the Coast Guard, in behalf of the pupils.

Immediately following an inspection of the Richardson plant by visiting Army, Navy and Coast Guard officers, the presentation ceremony was conducted with Henry W. Schmidt, City Attorney of North Tonawanda, as chairman. Mr. Schmidt introduced Captain Ralph W. Dempwolf, U.S.C.G., who made the presentation speech, assisted in the color ceremony by a detail of men from the Buffalo Base of the Coast Guard, and to the martial strains of the North Tonawanda High School Band. Sidney Walcott, President of Richardson, in accepting the award, commented on the fact that while the "E" award may appear commonplace to many now, less than 1½ per cent of all America's war production plants have been so honored.

Lieutenant Rexford H. Dettre, representing the Army, presented "E" pins to Richardson's two employees with the longest service: John Jacobs and John Bartell. Acceptance of the award for the workers was in the hands of Freeman Rowe, Chairman of the Shop Committee of Local 308, United Electrical, Radio and Machine Workers of America (CIO).

Sidney Walcott, President of Richardson Boat Company, accepts the Army-Navy "E" from Captain Ralph W. Dempwolf, USCG

JOHN REINER & CO. RECEIVES AWARD

John Reiner & Co., Long Island City, N. Y., specialists in Diesel auxiliary units and generating sets for marine and industrial use, has been awarded an Army-Navy "E." The company holds an enviable record for quick delivery and excellence of design and construction with the Army, Navy and Coast Guard as well as with principal shipyards throughout the country.

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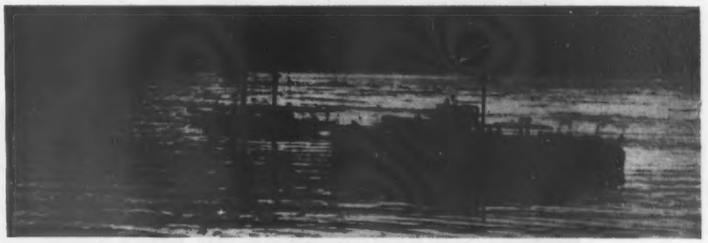

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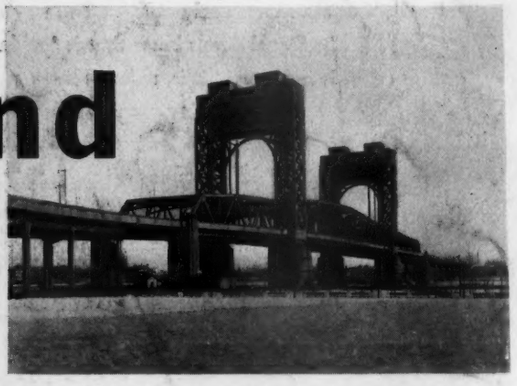
on land



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